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PREFACE

This volume is approved for publication.

J. F. HELLWEG,
Captain, United States Navy, Superintendent.

UNITED STATES NAVAL OBSERVATORY, *January, 1932.*

RESULTS OF OBSERVATIONS

WITH THE

NINE-INCH TRANSIT CIRCLE
1913–1926

OBSERVATIONS OF THE SUN, MOON, AND PLANETS
CATALOGUE OF 9,989 STANDARD AND INTERMEDIARY STARS
MISCELLANEOUS STARS

BY
H. R. MORGAN

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INTRODUCTION

In a letter from the Superintendent of the United States Naval Observatory to the Permanent International Committee on the Photographic Chart of the Heavens, in November, 1910, it is stated that this Observatory had decided—

1. To attempt the observations of the BACKLUND stars in addition to the fundamental stars already on our program.

2. To undertake to secure four observations of each of the intermediary stars observable here.

This cooperation in an international scheme was in response to the following suggestions contained in the correspondence of the Permanent Committee:

That "two observatories, at least, should observe the intermediary stars of the northern hemisphere, extending their lists into the southern hemisphere as far as possible";

That "every cooperating observatory that will undertake to observe the intermediary stars should observe all the standard stars situated in the zone assigned to it, and beyond that zone as far as 2° from the border"; and

That "the standard stars must be observed with the fundamental stars," and that "the fundamental observations necessarily comprise observations of the Sun."

In *Bulletin du Comité International Permanent pour l'exécution photographique de la Carte de Ciel, Tome Septième,* is given the list of the intermediary stars. These range in magnitude from 7.0 to 9.5, the larger portion being between magnitudes 8.0 and 9.0. They were chosen to be used as an "intermediary" step between the brighter or better known stars and the fainter or "reference" stars used in reducing the photographic plates. There are 7,551 of these stars between +90° and −30° declination. Also in this list are given the standard stars selected by Doctor BACKLUND and Doctor HOUGH as supplemental to and better spaced than the older and brighter fundamental stars. These stars range in magnitude from 5.0 to 7.0, with an average of 6.5. There are 1,414 of these between +90° and −36° 5′ declination. In these two lists the stars are uniformly spaced in the sky and together they give five stars per hour for a zone 2° in width.

In *Liste Générale Provisoire D'Étoiles Fondamentales* (*Supplément a la Connaissance des Temps pour l'an 1914*), are given the BACKLUND-HOUGH standards, and all additional stars in the fundamental catalogues of NEWCOMB, BOSS, and AUWERS, of which there are 1,024 between +90° and −36° 5′ declination.

OBSERVATIONS

The work of the 9-inch transit circle for the years 1913–1926, the results of which are contained in this volume, included:

1. Four observations of all intermediary stars between +90° and −30° declination. None were observed below pole.

2. Four observations of all fundamental and standard stars, between +90° and −36° 5′ declination. Those north of +66° 5′ declination were observed also four times or more below pole.

3. Observations of the Moon and outer planets.

4. Day observations of clock stars, the Sun, Mercury, and Venus, were included in the working program from September, 1918, to February, 1925.

5. For the study of refraction, in addition to circumpolar observations, 40 stars were observed at zenith distances 75° to 82° both north and south, and the pairs, α Urs. Min. and θ Ceti, and α Urs. Min. S. P. and α Virginis, were observed whenever possible throughout the night.

6. Special lists of zenith stars were observed for the study of zenith terms. These included four observations of the photographic zenith tube list of 95 stars.

7. For the study of flexure special lists of stars were observed directly and by reflection.

8. Miscellaneous stars.

Many of the intermediary stars were too faint to be well observed here, especially those far south; some were observed but three times, while many stars of both lists were observed more than four times. Whenever an observation was incomplete it was repeated, and many observations were repeated on account of uncertainty in instrumental constants.

There were 107 stars in the provisional manuscript list of southern stars received in 1912 that were not in the final printed list, (Tome Septième), received in 1915. Many stars were taken by mistake for list stars near them, and some through mistakes in the provisional data. All such miscellaneous stars were observed a second time, if possible.

From August, 1913, to July, 1918, each star was observed once in each clamp of the instrument. In July, 1918, the reading circle was rotated 169° 18′ with respect to the tube of the instrument, and from then until June, 1925, each star was observed once more in each clamp of the instrument. A few observations for completing the program were taken from November, 1925, to June, 1926. And 72,380 observations were taken in the 13 years.

Approximate Number of Observations

Intermediary stars	32, 400	Day stars	3, 600
Standard stars	10, 580	Sun	600
Clock stars	16, 800	Moon	880
Azimuth stars	3, 000	Planets	1, 150
Zenith and refraction stars	1, 000		
Reflected stars	2, 370	Total	72, 380

PERSONNEL

Before November 11, 1913, the 9-inch transit circle was in charge of Prof. F. B. Littell, United States Navy, to whom many important improvements in the instrumental equipment were due. The general initiation of and preliminary plans for observing the intermediary stars were due largely to Prof. Littell, and to Prof. W. S. Eichelberger, United States Navy, who had been in charge of the previous work on this instrument, and very valuable suggestions and helpful encouragement have been received from both of these associates in the course of the work.

On November 11, 1913, the 9-inch transit circle was placed in charge of Astronomer H. R. Morgan. The observations, reductions, and discussions have been under the direct and responsible supervision of Mr. Morgan throughout the work.

Mr. JESSE PAWLING was the only other man connected with the work throughout, and his sustained interest and energetic cooperation in all branches of the work deserve hearty commendation. The observers were as follows:

H. R. MORGAN (M)	August, 1913–June, 1926
JESSE PAWLING (P)	August, 1913–June, 1926
J. B. EPPES (Ep)	August, 1913–February, 1914
L. P. STEELE (S)	January, 1914–May, 1917
PAUL SOLLENBERGER (Sr)	April, 1914–December, 1919
H. E. BURTON (Bn)	November, 1919–March, 1925
G. M. RAYNSFORD (Ry)	November, 1919–June, 1926

The Observatory is indebted to these assistants for their share in the heavy observing program, and for their part in the reductions. Valuable assistance in the reductions has also been given by U. S. LYONS, E. C. BOWER, and other members of the staff assigned at times to this division; also by Miss E. A. LAMSON and the assistants under her immediate supervision.

INSTRUMENTAL EQUIPMENT

Full descriptions of the 9-inch transit circle, its accessories and buildings, are given in previous volumes of this Observatory, especially in Publications of the United States Naval Observatory, Second Series, Volume IX, Parts I and IV. The more important alterations are given here.

Micrometer screw.—A new zenith distance micrometer screw and bearing were furnished in May, 1913, and at the same time new and differently spaced scores were cut in the micrometer plates and all new threads inserted. The fixed plate contains four sets of five vertical threads each and a double horizontal thread; the right ascension screw plate a double thread; and the zenith distance screw plate three sets of double threads of different width. As these threads became slack or broken at different times the micrometer was removed from the instrument and new threads were inserted. The reversing prism over the eyepiece was reversed in its cell in July, 1918, so that the prism was used in the first and second quadrants for half of the work and the third and fourth quadrants for the other half of the work.

Object glass.—The object glass was removed from its cell and cleaned in July, 1915, and in July, 1918. The $\frac{7}{16}$-inch field illumination mirror and its cell on the outer surface of the objective was replaced by a $\frac{14}{16}$-inch plane mirror and cell on June 30, 1913.

Circle.—The reading circle B was cleaned with oil and charcoal in August and September, 1918, by Mr. J. RHEINBOLD, foreman of the nautical instrument repair shop. The circle had become quite tarnished before this, and many divisions were poor and indistinct. In some places the divisions were poor after cleaning. A similar condition arose again toward the end of the work.

A new setting microscope and holder were adjusted in April, 1913.

New bearings for the ball-bearing rollers of the counterpoise hangers were inserted in December, 1920, the old ones having become badly worn.

Screens.—The screen system consists of three screens. The two fine wire gauze screens are of different mesh, and are mounted at the ends of rods on either side of and extending the length of the telescope tube so that the observer at the eye end may turn the screens on or off at will. They move in their own planes, which are parallel to and a few inches in front of the object glass. Screen I decreases a star image 3.0; screen II, 4.9; and both, III, 8.0 magnitudes. The cellular, or variable screen, designed by Professor LITTELL for elimination of magnitude equation, consists of two sets of thin brass slats intermeshing at right angles to each other, forming rectangular parallelopiped openings 0.2 inch square and 0.5 inch long. The slats are 0.008 inch thick and are held by an 11-inch aluminum ring, mounted about 3 inches in front of the object glass, and may be tilted about an axis parallel to a short diagonal of the parallelopiped by means of gear and a rod having a graduated head at the eye end. As the screen is tilted, the apertures in the line of sight decrease continuously in rhombic form.

As the gauze screens are used on stars brighter than 6.0 magnitudes, the variable is used only over a range of 3 magnitudes, or about 15° tilt, or from 0 to 15 divisions on the graduated head. The magnitude equivalent of this screen system is described on page 81. The screen in its zero position reduces the light power of the instrument by about 0.284 magnitude. This variable screen acts as a grating, the loss of light by decrease in aperture being increased by the loss in the diffraction spectra which appear in the field of the telescope at angles of 45° to the meridian and some 20″ from the central image, but which become inconspicuous with bright field illumination. The brightness of the central image varies approximately as the square of the aperture.

Comparator microscope.—A new high-powered comparator microscope adapted for use in measuring the errors of the micrometer screws without removing the micrometer from the instrument was put into use in 1915. This comparator is mounted on a lead base which rests firmly on the top plates of the micrometer when the instrument is clamped pointing to the nadir.

A new micrometer was put on the north collimator in May, 1914.

Various battery arrangements were tried for the small lamps used around the instrument until May, 1915, when all batteries were discarded and transformers from the 110-volt commercial circuit were introduced; 3.5–volt lamps were used on the microscopes and a 6-volt lamp for field illumination.

Thermometers.—The thermometer in the shelter on the outside of the north wall of the building and a thermometer nearly over the instrument are inclosed in brass cells about 2 feet long and 4 inches in diameter. Through these cells a current of air is drawn constantly by the suction of an electric exhaust fan connected to each by long 4-inch pipes. These thermometers are read through glass-covered openings in the cells, the one over the instrument ("upper") by means of a 3-foot telescope mounted on the north collimator pier, and the one outside ("outer") through a window in the wall. The upper thermometer is 10 feet above the floor, 5 feet south and 4 feet west of the instrument, and about the height of the objective and a few feet from it, when the instrument points to the equator. The 4-inch pipes and exhaust fan work into and out of a tight box near the fan in the northwest corner of the room.

A 3-inch pipe also runs from this box to the nadir box. By this means air from above the floor is drawn over the nadir basin through perforations in the floor cover and the equalization of temperature allows better images when the basin is uncovered for nadir observation, especially in cold weather. In 1918 a wet-bulb thermometer was mounted in the shelter some 2 or 3 inches from a vent in the suction pipe. The barometer is mounted on the clock pier near the east wall, and its cistern is 4 feet lower than the axis of the instrument and 286.1 feet above sea level.

Printing chronograph.—When installing the printing chronograph in the observer's room in November, 1913, various changes were made in the clock and key circuits and relays. The writing chronograph was used for the first eight months of the work, but from April, 1914, all transits were read from the printing chronograph records, and although various troubles arose from time to time with this chronograph, which were generally more of an electrical than mechanical nature, its record of nearly 70,000 observations in the 12 years, with the great saving of time and labor of computers, fully justified its use.

The printing chronograph was made by WM. GAERTNER & Co., of Chicago, and is similar to the one made by Professor HOUGH at the Dearborn Observatory. Its essential feature is a type wheel rotating once a second under magnetic control of the beats from the standard clock. A 100-tooth ratchet wheel is rotated uniformly a little faster than once a second by means of the usual chronograph weight and friction governor device, and the type wheel shaft coaxial with this ratchet wheel carries a pawl which, when engaged, carries the two wheels together. This pawl passes under an electromagnet in the clock circuit at the end of each second, and if it reaches the magnet before the clock breaks the circuit it is disengaged and held by the magnet until the clock breaks and allows it to reengage in the rotating 100-tooth wheel and rotate as before, carrying the type wheel with it. A control obtains whenever the type wheel gains $0^s.01$ or more in four seconds so that a number of controls occur each minute. A second and third type wheel are advanced once a second and once a minute, respectively. The paper is lightly and quickly impressed against the type wheels by highly flexible spring hammers actuated by a magnet working in the key circuit.

Two observing keys were used—one for stars north and one for stars south of the zenith—and these keys were interchanged at intervals.

One or another of the three RIEFLER clocks kept at constant pressure and temperature in the clock vault was used as a standard clock.

ROUTINE OF OBSERVING

Observations were carried on regularly six nights a week. The night was always divided between two observers. In the long winter nights four lists of from two to three hours each were observed, and four collimations and six levels and azimuths and nadirs were taken, the evening observer working from 4 or 5 p. m. until midnight, and the morning observer from midnight until 7 or 8 a. m., the end constants being taken partly in daylight. On shorter nights one or two of the lists were omitted. In two weeks each of the observers worked evenings and mornings preceding and following each of the other observers once. All observations for positions of stars, except some of the azimuth stars, were made at night with the Sun 5° or more below the horizon. The nights varied from 8 hours long in summer to 14 hours long in winter. Only the brighter stars with which screens could be used were taken near the twilight limits, the screens cutting out the twilight so as to use artificial field illumination.

The azimuth stars were regularly observed from 5 to 7 a. m. and from 5 to 7 p. m. To avoid observations far out into the daylight in the summer time and still to maintain groups of 12-hour azimuth, the azimuth stars were frequently observed after 6 p. m. at one culmination and a week or so later before 6 a. m. at the other culmination. Declinations of these stars were not observed far outside the twilight limits.

The intermediary and standard stars were observed coextensively in right ascension and declination, the observations extending throughout the meridian in each list, and in proportion to their respective numbers, and an endeavor was made to maintain a purely differential relation between the intermediary and standard stars in the same region, by reducing them with the same instrumental and other reduction constants, and by applying the same systematic corrections to both.

The Moon, planets, and azimuth stars were taken as convenient before, after, or among the constants, but all list star observations were enclosed by two sets of constants; a set of constants consisting of a collimation, a level, an azimuth, and a nadir. For the first five years a spirit level was taken before the first set of constants in the evening and after the last set in the morning.

The day work, which was carried on for four days each week, and was commenced in September, 1918, consisted of observations of four clock stars each side of the Sun, when possible, and as close to it in both coordinates as possible; observations of the Sun and Mercury continually, and of Venus thirty times near each inferior conjunction. Three sets of constants were taken, the middle set as near the Sun as possible. An assistant read the microscopes for an observation of the Sun and for the nadir used in reducing that observation.

Except for the Sun observation, an observer always worked alone, reading his own microscopes; and his work was reduced with his own constants, and at night with his own clock correction. When a diameter of the Moon was observable that coordinate only was observed, otherwise one limb in each coordinate; and an observer could make either observation unassisted.

The telescope was set by use of the circle A at the clamp end of the axis. By means of the clamp and slow motion the instrument was set to bring a 2′ division accurately between the close double threads in the setting microscope. By this means the divisions on circle B were always brought to approximately the same readings on the four reading microscope heads, both for the nadir and for all objects observed, with consequent elimination of any error of runs not taken out by the frequent examination and adjustments that were made for such errors. Except for the Sun and Moon, the microscopes were invariably set on the circle immediately after the observation at the eye end was completed. The instrument was reversed three or four times a year, and the same divisions on circle B were used for the nadir readings in both clamps.

In observations for right ascension the limbs of the Sun, Moon and Venus, the centers of Mercury, Uranus, and Neptune, and all stars of declination less than 85° were observed over the 10 fixed transit threads and recorded by key and chronograph. Each limb of Mars, Jupiter, and Saturn was observed over from four to six threads and similarly recorded. Stars above 85° in declination were observed "eye and ear," those above 87° being taken in part over the inner transit threads and in part over the movable micrometer threads set near the middle of the field.

In observations for zenith distance of stars one bisection was taken on each prism, one before and one after the transits; single limbs of the Moon, the planets, and stars at large zenith distances, had two bisections on each prism; and each limb of the diameter of the Sun and Moon had one bisection on each prism, both on one side of the meridian. Jupiter was placed between the wide zenith distance doubles A (40″); Mars and Saturn between the doubles C (15″). The centers of Mercury, Uranus, Neptune, and the limbs of the Sun, Moon, and Venus, and all stars were bisected using the close doubles B (7″), to which all zenith distance work was referred, and which were used for the nadir pointings. As many as five bisections may be taken and left recorded on the micrometer head.

In general, stars brighter than magnitude 1.5 were screened by the wire gauze screens I and II; those from 1.6 to 4.0 by screen II; those from 4.1 to 6.0 by screen I; and the balance needed to reduce the magnitude to 9.5 in any case was made by the variable screen. The amount of screen used was recorded for each object. Less screen was used when cloudy and in daylight. Screen I was used on the Moon and bright planets. The aperture of the objective was reduced to 4 inches for the Sun observations.

The barometer and, after 1918.5, the wet-bulb thermometer were read every hour or less and the outer and upper thermometers every 15 to 20 minutes, and readings were taken for all isolated objects.

RIGHT ASCENSIONS

Spirit level.—The calibration of the vial of the hanging level was examined with nine sets of measures, and no error exceeding 0″.02 was found along the middle of the scale. The value of one division of the level, 1″.037 was the mean of eight determinations taken between 1913 and 1917. Readings with this level were taken twice a day from 1913 to 1918 and were used for investigating the instrument and not for reducing the observations.

Micrometer screw.—From 15 sets of measures, 1911–1926, the periodic errors of this screw were found to be negligible, as follows:

$$\Delta = 0^{s}0000 \sin\theta + 0^{s}0000 \cos\theta - 0^{s}0001 \sin 2\theta + 0^{s}0000 \cos 2\theta$$

and five sets of measures gave the progressive error as follows:

R	ΔR	R	ΔR
	s		s
3. 5	−0. 032	10. 5	+0. 004
4. 5	− . 026	11. 5	+ . 013
5. 5	− . 018	12. 5	+ . 018
6. 5	− . 018	13. 5	+ . 016
7. 5	− . 011	14. 5	+ . 019
8. 5	− . 010	15. 5	+ . 018
9. 5	+ . 001	16. 5	+ . 025

Corrections for this progressive error were used in deriving the value of one revolution of this screw from measures of the intervals of the 10 transit threads, and, in turn, in determining thread intervals from such measures.

All determinations of the instrumental constants, collimation, level, and azimuth, and certain observations of pole stars were made with the double threads, ($0^{s}.45$), on the plate carried by this screw, and such measures were made near the middle of the field, where the mean value of a revolution obtains, and where there were no corrections for screw errors. These threads were adjusted parallel to the mean of the 10 transit threads. By means of daily coincidences of the moveable threads with the middle two of the fixed transit threads, and frequent coincidences with all 10 threads, to which all observations were referred, the measures with the movable threads, such as the constants, were reduced to the mean of the 10 threads

This screw has been in use since 1903 and the value of one revolution from measures in 1903–1908 was $1^{s}.5246$. A preliminary examination in 1913–1914 gave $1^{s}.5239$, and $1^{s}.5243$ was used in reducing all the work. From 1913 to 1926 the intervals of the 10 fixed threads were measured 60 times with this screw, and, using the intervals as given by some 700 to 800 transits of circumpolar stars, the definitive value of one revolution of the right ascension micrometer screw is $1^{s}.5245$.

Transit threads.—Of the 20 vertical threads on the fixed plate of the micrometer, the middle 10 constitute the standard to which all right ascension work was reduced. The micrometer was adjusted to the tube of the telescope so that the mean of these 10 threads would be vertical. The intervals of these 10 threads were frequently determined throughout the work, both by means of transits, mostly from regular observations of circumpolar stars, and by measures with the right ascension micrometer screw. Altogether 12 different sets of thread intervals were adopted and used over periods ranging from a month to three years. The variations of the intervals for individual threads seldom exceeded $0^{s}.02$. Whenever the threads became slack, or when disturbed, or when new threads were inserted the intervals were examined. The approximate equatorial intervals from the instrumental meridian were as follows:

1	2	3	4	5	6	7	8	9	10
$-9^{s}.44$	$-7^{s}.44$	$-5^{s}.97$	$-4^{s}.12$	$-2^{s}.67$	$+2^{s}.67$	$+4^{s}.12$	$+5^{s}.97$	$+7^{s}.44$	$+9^{s}.44$

All observations taken over less than 10 threads were reduced to the mean of the 10 by the adopted intervals of that epoch.

The records on the writing chronograph were read to $0^{s}.05$, those on the printing chronograph to $0^{s}.02$, and the mean thread was carried to $0^{s}.001$ up to 60° declination, and to $0^{s}.01$ north of that. Whenever transits of the Sun, Moon, or planets were not symmetrical with regard to the meridian reductions for motion were included in the mean thread. The prism over the eyepiece was regularly reversed as the object under observation crossed the meridian. The prism equations, or the differences in personal equation due to the difference in apparent motion in the field, right to left, or left to right, were derived from measures on the personal equation machine, combined with determinations from the observations themselves. The corrections for prism equation were always small, and but little used except in two cases, that of eye and ear transits by Morgan, $0^{s}.06$, and chronograph transits by Pawling, $0^{s}.020$. Whenever the number of transits on the two prisms were unequal, corrections were applied for the above.

INSTRUMENTAL CONSTANTS

The time of transit over the mean thread of the instrument was reduced to that over the meridian by means of MAYER's formula:

$$\tau = a \sin(\varphi-\delta) \sec\delta + b \cos(\varphi-\delta) \sec\delta + c \sec\delta$$

The trigonometrical factors in the above were taken from printed tables prepared for this latitude. For observations of the Moon a correction was applied for motion in the interval τ.

The small corrections for pivots were not introduced until the final right ascensions.

Collimation.—The collimation constant was determined by use of the two horizontal collimators, the immediate reduction giving the collimation of the moveable double threads. This was reduced to the mean of the 10 threads by adopted coincidences, and the daily aberration, $-0^{s}.016$, was also added. The collimation furnished by simultaneous readings on the two meridian marks was not used but all outstanding variations in the collimation from the collimators were checked by the collimation from the marks. There was no constant difference between them.

Level.—The level constant was determined by use of the mercury basin. The spirit level measures were not used in the reductions.

Azimuth.—The azimuth constant was determined by use of both north and south meridian marks.

The methods of determining and reducing these constants and discussions of their variations with temperature are given fully in Volume IX, Part I. The level and azimuth constants were taken on an average of every three hours at night, and, in general, if two consecutive values of these constants differed less than $0^{s}.03$ a mean was used, otherwise an interpolation was made for the included objects. The collimation was taken at the beginning and ending of each man's tour, and the variations were so small that a mean of the two determinations was always used. The Sun was reduced with one set of constants taken especially for it, and this was frequently the case with the Moon and planets. A very few clock corrections depended on but one set of constants, but this was rarely the case where list stars were observed.

The variations of the constants in the present work are quite similar to those found in the old work. This instrument has small persistent daily variations in level and azimuth, averaging some $0^{s}.003$ or $0^{s}.004$ per degree of temperature and lagging a few hours behind the temperature changes. The azimuth varies less in summer and more in winter. The annual terms are a month behind the annual temperature curves.

THE AZIMUTH OF THE MARKS

Circumpolar observations.—The azimuths of the north and south meridian marks were determined from observations of the 17 north circumpolar stars for which daily ephemerides were given in the American Ephemeris, the 6 between 81° and 85° declination being observed by key and chronograph, and the 11 from 85° to 89° eye and ear. Normally a pair of stars, one above and one below the pole, was observed at each end of the night, the collimation, level and mark readings being always taken near them. As any one azimuth star was observed an equal number of times each side the pole by any one observer such that the right ascension was eliminated in the mean, the preliminary reductions were made using the right ascensions from the Ephemeris. Corrections for collimation and level being applied to the times of transit, the azimuth of the instrument, a, was deduced by the formula

$$(A-A')\ a=(\alpha-T)-(\alpha'-T')$$

in which A', and $(\alpha'-T')$, were always the means from two clock stars taken near the azimuth star in right ascension. This value of the azimuth of the instrument applied to the simultaneously measured difference in azimuth of the instrument and of the north and south marks, K_n and K_s, gave the azimuth of the marks, A_n and A_s, from each azimuth star.

Provisional positions.—For purposes of examination and proper grouping of the positions of the marks, provisional corrections for star place and personal equation were applied to the individual azimuths of the marks. The corrections for star place used in determining the grouping for 1913–1920 were those given by the 1908–1911 work of this instrument; and for 1921–1925 were those given by a provisional examination of the positions of the marks, 1913–1921, from above and below pole observations. The corrections for personal equation used in the examinations were quite similar to the final machine results given on pages 29–30. Neither of these corrections entered in to the adopted position of the marks. Means were formed for each clamp period, generally three months or less in length, and from an examination of the residuals from these means the final grouping was determined, such that the azimuth of both marks remained sensibly constant during that period, and also depended upon a sufficient number of observations.

Fundamental positions.—These periods being determined, the azimuths in each group were rigidly balanced above and below the pole for each star and each observer and the means formed. This fundamental process was used throughout the 12 years, any azimuth not being balanced, as above, in each period, was blocked out and not used in the group mean. The average residual for stars at 82° was $\pm 0^s.027$ and for stars at 89° $\pm 0^s.024$. Hence observations at all declinations were given equal weights. The probable error of a group mean was $\pm 0^s.003$. The probable error of a reading on the mark was $\pm 0^s.009$. The probable error of an azimuth of the instrument from one pole star was $\pm 0^s.020$, which included star place, and the probable error of an azimuth of the instrument from one reading on the mark using it's adopted mean position was $\pm 0^s.009$. As four such readings were taken for a list the azimuth using the marks had the accuracy of several observations of azimuth stars in each list and gave more accurate value of its variation during the list. The stability of the marks afforded an accurate means of determining the azimuth of the instrument.

In the following table columns 5 and 6 give the final fundamental positions of the two marks used in reducing the work. Column 7 gives the variation in azimuth of the meridan at Washington due to the motion of the pole of the earth. Column 8 gives the differences at reversals. The group 1914.80 had but 10 observations extending over 22 days; the lamp at the south mark was adjusted too bright at this time. In 1915.5 the mountings of the lenses were painted. In 1922.70 and 1922.82 the change was probably due to poor adjustment of the instrument. There was trouble with the threads sagging, and the set screw against the micrometer tail piece in the tube of the instrument was found loose in the first group. The collimations from marks and collimators were discordant. All the observations from 1922.62 to 1922.68 were repeated later. The north mark has a progressive motion of about $+0^s.007$ per year, and the south mark an annual term approximating $0^s.02 \sin T$, in addition to the annual component of the polar motion. The south mark changed $0^s.05$ in 1915, and $0^s.03$ again in 1922. Columns 9 and 10 give the azimuths corrected for these motions and the last column gives the residuals from a mean for the 12 years. A considerable part of these residuals is due to using a mean value instead of the instantaneous value of the clamp term. They give $\pm 0^s.007$ as the probable error of a group, whereas the probable error from internal residuals is $\pm 0^s.003$ for A_n and A_s in columns 5 and 6 which were the only quantities in the table used in reducing the right ascensions.

Azimuths of the North and South Meridian Marks

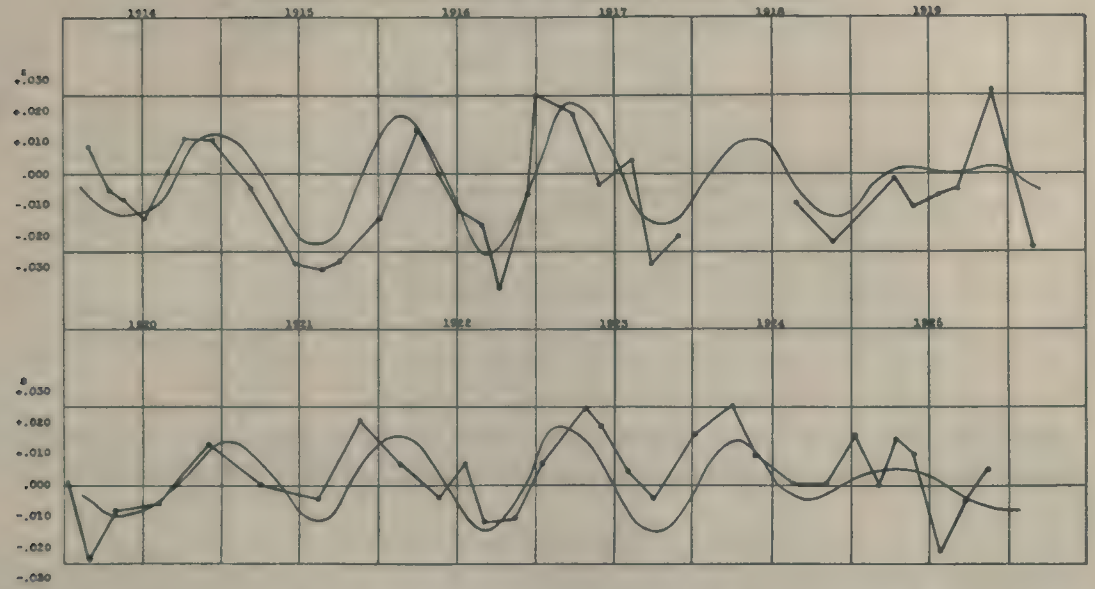
Mean date	No. days	No. obs.	Cl.	A_n	A_s	Δap	W—E	A'_n	A'_s	$\frac{1}{2}(A'_n-A'_s)$ $-^s.074$	$\frac{1}{2}(A'_n+A'_s)$ $+^s.217$
1913				s	s	s	s	s	s	s	s
.67	61	26	W	−0.180	−0.359	+0.006	....	−0.111	−0.295	+0.018	+0.014
.80	26	24	W	.196	.362	+ .012	....	.122	.298	+ .014	+ .007
.89	31	28	E	.131	.348	+ .013	−0.034	.101	.323	+ .032	+ .005
1914											
.01	53	30	E	− .159	− .342	+ .012	....	− .131	− .307	+ .014	− .002
.16	42	20	W	.194	.381	+ .005	− .040	.130	.292	+ .007	+ .006
.27	38	22	W	.182	.381	− .004	....	.128	.293	+ .008	+ .007
.45	78	32	E	.140	.326	− .012	− .038	.138	.298	+ .006	− .001
.69	50	38	E	.151	.315	− .005	....	.144	.308	+ .008	− .009
.80	22	10	E	.151	.232	+ .004	....	.136	.220	[− .031]	[+ .039]
.98	74	70	W	.229	.380	+ .018	− .055	.157	.298	− .004	− .011
1915											
.14	24	22	E	− .191	− .353	+ .022	− .044	− .160	− .292	− .008	− .009
.25	49	28	E	.176	.367	+ .017	....	.152	.303	+ .002	− .011
.51	57	24	W	.207	.379	− .011	− .036	.168	.316	.000	− .025
.75	50	64	W	.163	.293	− .014	....	.128	.306	+ .015	.000
.89	44	30	E	.135	.262	− .003	− .068	.135	.304	+ .010	− .003
1916											
.01	42	18	E	− .148	− .286	+ .011	....	− .135	− .302	+ .010	− .001
.16	48	28	W	.209	.338	+ .024	− .044	.139	.279	− .004	+ .008
.27	38	20	W	.219	.374	+ .024	....	.151	.308	+ .004	− .013
.44	65	22	E	.146	.291	+ .007	− .060	.140	.294	+ .003	.000
.50	62	28	E	.121	.245	.000	....	.122	.261	− .004	+ .025
.73	52	48	W	.167	.275	− .020	− .060	.145	.291	−. 001	− .001
.90	65	48	E	.131	.266	− .016	− .028	.151	.320	+ .010	− .019
1917											
.12	76	36	W	− .178	− .317	+ .007	− .026	− .132	− .280	.000	+ .011
.24	46	32	W	.198	.371	+ .015	....	.145	.315	+ .011	− .013
.41	62	38	E	.140	.322	+ .015	− .038	.132	.313	+ .016	− .005
1918											
.15	77	64	W	− .187	− .330	+ .004	− .046	− .151	− .292	− .004	− .005
.39	79	38	W	.180	.365	+ .013	....	.137	.314	+ .014	− .009
.78	23	40	W	.184	.306	− .001	....	.146	.293	.000	− .003
.90	60	54	W	.186	.324	− .002	....	.150	.308	+ .005	− .012

Azimuths of the North and South Meridian Marks—Continued

Mean date	No. days	No. obs.	Cl.	A_n	A_s	Δap	W—E	A'_n	A'_s	$\frac{1}{2}(A'_n-A'_s)$ $-^{s}.074$	$\frac{1}{2}(A'_n+A'_s)$ $+^{s}.217$
1919				s	s	s	s	s	s	s	s
. 06	33	36	E	−0. 129	−0. 255	−0. 001	−0. 067	−0. 161	−0. 289	−0. 010	−0. 008
. 18	39	32	E	. 116	. 277	− . 001	--------	. 149	. 297	. 000	− . 006
. 40	76	48	W	. 160	. 304	− . 002	− . 058	. 127	. 256	− . 010	+ . 025
. 66	63	48	W	. 181	. 355	+ . 004	--------	. 144	. 329	+ . 018	− . 019
. 83	50	54	E	. 115	. 247	+ . 009	− . 065	. 142	. 291	. 000	+ . 001
1920											
. 10	103	92	W	− . 184	− . 332	+ . 005	− . 070	− . 149	− . 287	− . 005	− . 001
. 41	127	82	E	. 094	. 256	− . 011	− . 072	. 145	. 285	− . 004	+ . 002
. 75	107	104	W	. 169	. 305	− . 009	− . 079	. 152	. 299	. 000	− . 009
1921											
. 11	89	66	E	− . 117	− . 253	+ . 012	− . 084	− . 150	− . 268	− . 015	+ . 008
. 38	85	36	W	. 156	. 309	− . 006	− . 078	. 141	. 264	− . 012	+ . 015
. 64	100	76	W	. 165	. 297	− . 017	--------	. 163	. 291	− . 010	− . 010
. 88	69	60	E	. 117	. 224	− . 005	− . 061	. 173	. 280	− . 020	− . 009
1922											
. 05	27	24	W	− . 172	− . 298	+ . 010	− . 050	− . 146	− . 254	− . 020	+ . 017
. 16	52	22	W	. 183	. 338	+ . 013	--------	. 155	. 278	− . 012	+ . 001
. 36	66	34	E	. 105	. 282	+ . 004	− . 048	. 155	. 294	− . 004	− . 007
. 54	50	16	W	. 155	. 312	− . 013	− . 066	. 155	. 290	− . 006	− . 006
. 70	57	38	E	. 006	. 262	− . 019	− . 076	. 081	. 301	[+ . 036]	[+ . 026]
. 82	32	24	E	. 000	. 305	− . 014	--------	. 071	. 343	[+ . 062]	[+ . 010]
. 92	38	22	E	. 044	. 276	− . 006	--------	. 108	. 300	[+ . 022]	[+ . 013]
1923											
. 09	56	36	W	− . 152	− . 349	+ . 008	− . 076	− . 135	− . 272	− . 006	+ . 013
. 25	64	44	W	. 149	. 384	+ . 014	--------	. 127	. 287	+ . 006	+ . 010
. 51	114	82	E	. 057	. 284	+ . 002	− . 072	. 117	. 281	+ . 008	+ . 018
. 75	52	42	E	. 057	. 240	− . 014	--------	. 135	. 277	− . 003	+ . 011
. 90	49	28	W	. 144	. 322	− . 011	− . 082	. 152	. 285	− . 008	− . 001
1924											
. 13	86	54	W	− . 154	− . 354	+ . 003	--------	− . 149	− . 277	− . 010	+ . 004
. 34	69	40	E	. 068	. 312	+ . 002	− . 068	. 134	. 295	+ . 006	+ . 003
. 52	46	38	W	. 125	. 345	− . 001	− . 056	. 127	. 278	+ . 002	+ . 015
. 68	62	44	E	. 075	. 271	− . 005	− . 048	. 150	. 295	− . 002	− . 005
. 79	16	38	W	. 138	. 308	− . 006	− . 054	. 147	. 270	− . 012	+ . 009
. 90	52	48	E	. 071	. 250	− . 005	− . 064	. 148	. 275	− . 010	+ . 005
1925											
. 07	56	36	W	− . 176	− . 361	− . 001	− . 096	− . 182	− . 296	− . 017	− . 022
. 21	42	32	E	. 081	. 301	+ . 004	− . 090	. 151	. 284	− . 008	− . 001
. 37	70	52	W	. 141	. 359	+ . 006	− . 058	. 142	. 271	− . 010	+ . 011

In the accompanying plot the smooth curve shows the variation in azimuth of the meridian due to the motion of the pole as given by the latitude work, and the broken line shows the same motion as given by the observed azimuths of the marks.

Variations of Azimuth of Meridian Marks, and of Azimuth of Meridian



Daily variations.—From an examination of some 1,600 observations of azimuth stars with this instrument in 1903–1911, the difference in the positions of the marks, morning and evening, was found to be $+0^{s}004$. From a similar examination of some 2,800 observations in 1913–1925 the difference, morning minus evening, was found to be $+0^{s}006$, for 12-hour intervals, as given in the following table. The variation was quite the same for both marks, and the mean is given. The positions of the stars used in the first two groups were those from the 1908–1911 work, and in the next two groups from an examination of above and below pole observations 1913–1921. The difference seems to be, in part, dependent on star place. It effects the morning minus evening clocks by $0^{s}002$. (See page 21).

Daily Variations in the Azimuths of the Meridian Marks

Morning minus evening, ½ $(A_n + A_s)$				
Season	1903–1911	1913–1919	1913–1919	1920–1925
	s	s	s	s
January, February, March	+0. 003	+0. 024	+0. 005	−0. 007
April, May, June	+ . 020	+ . 010	+ . 008	+ . 008
July, August, September	− . 006	+ . 004	+ . 013	+ . 015
October, November, December	+ . 003	− . 004	+ . 001	+ . 010
Mean	+ . 004	+ . 008	+ . 007	+ . 006

Daily Variations in the Azimuths of the Meridian Marks—Continued

Year		No.	Year		No.
	s			s	
1913	+0.012	100	1921	+0.015	272
1914	+ .002	215	1922	− .001	227
1915	+ .003	257	1923	+ .008	298
1916	+ .010	194	1924	− .006	282
1917	+ .011	110	1925	− .013	123
1918	+ .014	206			
1919	.000	293	Mean	+ .006	2,871
1920	+ .019	294			

Azimuth stars were often observed also during the night, and a comparison of the resulting azimuths of the marks showed no appreciable variation during the night.

CLOCK CORRECTIONS AND RATES

The clock stars.—The clock corrections were derived from observations of 186 of the brighter stars between −16° and +29° declination, apparent places of which are given in the American Ephemeris. The list is given on pages 22–26. The average declination of these stars is +6°.8 and the average magnitude 3.8. Sixty-one of these stars, marked "D," were observed also in the daytime together with 30 additional bright stars, also given in the Ephemeris, and ranging in declination from +39° to −30°. See page 27. Observations of these latter were never included in the standard night clock corrections. The apparent places of all stars in the American Ephemeris were taken from the printed annual volumes commencing 1916.0. The places for 1913, 1914, and 1915 were reduced on the same basis by using the annual parallaxes, and orbit corrections as given in the 1916 Ephemeris, by including all short-period terms, including f', and by obtaining the extra decimal in right ascension and declination from the manuscript computing sheets from which the Ephemerides were published.

Preliminary clock corrections.—In determining the preliminary clock corrections the Ephemeris places had applied to them the corrections to Newcomb derived from the preceeding work on this instrument as given in the "Individual Results" of Volume IX, Part I, pages A 75–A 380. The clock sheets were reduced and the resulting preliminary clock correction derived from August, 1913, to May, 1923, before the clock corrections were needed on the regular reduction sheets. The observations of the clocks stars for these years were therefore used for determining their definitive positions, as detailed presently. The preliminary clock corrections were not used on the reduction sheets.

Variation with declination.—In order to see how closely these positions satisfied the instrumental meridian the observations were examined as follows: In every list from 1913 to 1918.5 when there were observations of three or more clock stars between −1° and +12° declination, the mean correction from them was taken from that of each of the clock stars of the list, allowing for clock rate, and such differences grouped by declinations and clamp as follows:

There was no correction for variation of personal equation with declination within the range of the clock stars.

Variation of the Preliminary Clock Corrections with Declination

Decl.	Cl. W		Cl. E	
	No.	$\delta\Delta T$	No.	$\delta\Delta T$
°		s		s
+24	173	+0.004	173	−0.007
+19	168	+ .007	173	− .007
+14	167	+ .003	173	+ .001
+10	171	− .002	173	− .001
+ 8	170	+ .003	177	+ .003
+ 6	168	− .001	172	− .003
+ 4	172	.000	166	+ .002
0	170	.000	169	.000
− 6	173	+ .007	172	+ .010
−11	170	− .008	174	+ .005

Clock rates.—After application of provisional values of the relative personal equations of the observers given by the personal equation machine or by the examination of the clock corrections in the periods preceding that under examination from year to year, the preliminary clock corrections were tabulated by periods of continuity. The clock corrections taken at about the same sidereal time a few nights apart, preferably from three to six nights, were differenced, and resulting hourly rates of the clock derived. Group means of these rates were plotted and the smooth curve drawn through them gave the preliminary clock rates for the period. Largely in this process each clock correction was subtracted from a preceding and a following one, and as observations were so planned that each observer worked three mornings and three evenings in a two weeks' period, once each night preceding and once following each of the other three observers, the personal equations were largely eliminated in the group mean of individual clock rates. This preliminary clock rate curve was then integrated from some middle date to the time of each clock correction in the group, and by this means each clock correction was reduced to the common date. All clock corrections for the 12 years were examined in this way and any standing out from those near it were rechecked. Except for investigation of the day terms the clock rate was required for a few hours only from the time of the clock correction.

Relative personal equations.—The clock corrections at common epochs were meaned by observers to give the corrections to the provisional values of the relative equations. The relative personal equations derived in this way were considered definitive, and were used in deriving the definitive clock rates; in the determination of the definitive clock system; and in the derivation of clock corrections for reduction of the day work. They are given in the following table.

Relative Personal Equations of Observers on Clock Corrections

1900+	M−P	M−S	M−Sr	M−Bn	M−Ry
	s	s	s	s	s
13. 59–14. 08	+0. 056				
14. 10–14. 55	+ . 009	+0. 109			
14. 62–15. 08	+ . 007	+ . 132	+0. 085		
15. 10–15. 58	+ . 018	+ . 134	+ . 080		
15. 68–16. 07	. 000	+ . 100	+ . 089		
16. 10–16. 59	− . 024	+ . 103	+ . 032		
16. 67–16. 99	− . 031	+ . 078	+ . 033		
17. 01–17. 49	− . 051	+ . 071	− . 008		
18. 05–18. 50	− . 013		+ . 023		
18. 79–19. 76	− . 008		+ . 037		
19. 76–19. 90	− . 019		− . 010		
19. 95–20. 24	− . 043			+0. 079	+0. 054
20. 24–20. 59	− . 009			+ . 058	+ . 102
20. 61–20. 90	− . 039			+ . 037	+ . 066
20. 99–21. 97	− . 019			+ . 040	+ . 084
22. 01–23. 34	+ . 012			+ . 040	+ . 086
23. 35–25. 47	− . 031			+ . 031	+ . 065

In most years a second computation of the clock rates was made, using the above relative equations, and the corresponding curve gave the definitive clock rates. The two rate curves always agreed closely except where from an examination of the preliminary curve a regrouping of individual rates was considered advisable. As in observations at the same part of the night a few nights apart many of the clock stars were common, the definitive clock rates were quite free from accidental errors of the preliminary star places, and very free from systematic errors. Moreover the differences between the definitive and preliminary star places were quite small. The rates should be comparatively free from any daily terms there may be in the instrument. The rate curves were often continuous for several months.

Daily variation in clock corrections.—An examination for daily variations in clock corrections or in clock rates was made by comparing clock corrections taken shortly after sunset with those taken shortly before sunrise on the same night. Some 5,000 observations on 700 nights, 1913–1923, were used. Corrections for revised personal equations and star places were included; the day-to-day clock rates from the rate curves were used, and the proportional part of the 12-hour variation of the azimuth of the marks taken account of. Two sets of quantities were derived—the first using all the observations of clock stars, averaging six to seven each end of the night; the second using that half of each list coming near the twilight. It was the rule to observe three or four clocks near the twilight limits. The average intervals across midnight were 7.5 and 9.5 hours. The differences morning minus evening arranged by seasons show no seasonal term. The difference is a little larger for the twilight groups but the results show that there is practically no variation of clock corrections or clock rates during the night. In *Astr. Jour.* No. 795 a similar result is given from an examination of observations made with this instrument on some 500 nights, 1903–1911, where the variation in seven or eight hours was found to be, morning minus evening,—$0^{s}.007$, as compared with the mean, $0^{s}.000$, given below.

Morning Clock Corrections minus Evening Clock Corrections

Season	Using all stars				Using end night stars			
	No.	Int.	$\delta\Delta T$	$\delta\Delta T-\Delta A$	No.	Int.	$\delta\Delta T$	$\delta\Delta T-\Delta A$
1913.6–18.5								
		h	s	s		h	s	s
January, February, March	81	8	−0.002	−0.004	79	10	+0.009	+0.006
April, May, June	75	6	.000	− .003	73	8	+ .013	+ .009
July, August, September	57	7	+ .012	+ .008	54	9	+ .013	+ .009
October, November, December	95	9	+ .008	+ .006	92	11	+ .015	+ .012
1918.5−24.0								
January, February, March	84	8	+0.003	+0.003	85	10	+0.008	+0.008
April, May, June	98	6	+ .004	+ .001	93	8	+ .009	+ .005
July, August, September	100	7	− .003	− .009	100	9	+ .007	− .001
October, November, December	105	9	+ .002	− .001	105	11	+ .001	− .003
Mean				.000				+ .005

Morning Clock Corrections Minus Evening Clock Corrections

Year	Using all stars			Using end night stars		
	No.	$\delta\Delta T$	$\delta\Delta T-\Delta A$	No.	$\delta\Delta T$	$\delta\Delta T-\Delta A$
		s	s		s	s
1913	39	+0.001	−0.003	39	−0.003	−0.008
1914	70	+ .009	+ .008	70	+ .013	+ .012
1915	73	+ .008	+ .007	70	+ .017	+ .016
1916	76	+ .001	− .002	71	+ .014	+ .010
1917	32	.000	− .004	32	+ .015	+ .010
1918	39	.000	− .005	37	+ .001	− .005
1919	51	+ .003	+ .003	53	+ .002	+ .002
1920	94	.000	− .006	91	+ .004	− .004
1921	81	.000	− .005	81	+ .009	+ .002
1922	74	+ .008	+ .008	74	+ .012	+ .012
1923	66	.000	− .003	63	+ .008	+ .004
Mean			.000			+ .005

Definitive clock star positions.—In the period 1913.6–1923.3 there were 698 "double" nights in which clock corrections were determined by two observers, one near each end of the night. The observations extended over 8 hours on summer nights to 14 hours on winter nights. There were 8,454 observations of the 186 standard clock stars, or an average of 45 observations per star and 12 stars per night, and mean epoch about 1919. The clock correction from each clock star on such nights had applied to it the definitive relative personal equation and the definitive clock rate to a common instant for the night, and the difference for each star from the mean for the night was taken as the correction to the preliminary position of that star. The resulting definitive positions of the clock stars are given in columns 7 and 6 of the table below as corrections to the positions in the American Ephemeris (NEWCOMB), and to EICHELBERGER's catalogue (American Ephemeris after 1928). Column 5 of the table gives the differences between the definitive and preliminary positions with the explanation that the preliminary positions averaged $+0^{s}.028$ on NEWCOMB, and the definitive positions based on EICHELBERGER's equinox averaged $-0^{s}.048$ on NEWCOMB. The constant $-0^{s}.076$ was applied in passing from the preliminary to the definitive clock corrections. In columns 9 and 11 the differences are given for the final catalogue positions which include nearly twice as many observations, and are reduced to the equinox of this catalogue. These differences vary with right ascension as follows:

$$(\text{Def.}-\text{Prel.}),\ \Delta\alpha=-0^{s}.0017\sin\alpha+0^{s}.0010\cos\alpha-0^{s}.0012\sin2\alpha+0^{s}.0043\cos2\alpha$$
$$(\text{Def.}-\text{Ei.}\ \ ),\ \Delta\alpha=+0^{s}.0022\sin\alpha-0^{s}.0028\cos\alpha-0^{s}.0004\sin2\alpha-0^{s}.0018\cos2\alpha$$
$$(\text{Def.}-\text{N.}\ \ ),\ \Delta\alpha=-0^{s}.0124\sin\alpha+0^{s}.0080\cos\alpha-0^{s}.0012\sin2\alpha+0^{s}.0053\cos2\alpha$$

and with declination as follows:

Decl.	No.	Def.−Prel.	Def.−Ei.	Def.−N.
° °		s	s	s
+28 to +23	18	−0. 003	+0. 001	−0. 014
+22 to +19	20	. 000	+ . 003	− . 008
+18 to +14	21	− . 004	. 000	− . 013
+13 to + 9	24	− . 001	+ . 001	− . 004
+ 8 to + 5	24	+ . 002	. 000	− . 001
+ 4 to 0	22	. 000	− . 003	+ . 002
0 to − 6	21	+ . 004	+ . 001	+ . 012
− 7 to − 9	19	+ . 002	− . 003	+ . 011
−10 to −15	17	. 000	. 000	+ . 015

The positions of the 30 additional stars for day work were derived using all the night observations of them, reduced with definitive clock corrections. The epoch of such observations was about 1923.0.

Right Ascensions of the Clock Stars

Star	Mag.	R. A.	Decl.	Def.-Prel.	Def.-Ei.	Def.-N.	No. Obs.	Cat.-Ei.	No. Obs.	Cat.-N.	Day
		h	°	s	s	s		s		s	
α Andromedæ	2. 2	0. 1	+28. 6	+0. 003	+0. 008	−0. 069	34	+0. 035	91	−0. 042	D
γ Pegasi	2. 9	0. 2	+14. 7	+ . 002	+ . 002	− . 055	35	+ . 033	94	− . 024	D
ι Ceti	3. 8	0. 3	− 9. 3	− . 002	− . 012	− . 038	28	+ . 027	63	+ . 001	----
13 Ceti	5. 2	0. 5	− 4. 0	+ . 006	− . 006	− . 028	42	+ . 025	104	+ . 003	----
ζ Andromedæ	4. 3	0. 7	+23. 8	+ . 019	+ . 015	− . 054	40	+ . 044	89	− . 025	----
δ Piscium	4. 6	0. 7	+ 7. 1	+ . 003	− . 007	− . 045	32	+ . 026	61	− . 012	----
ε Piscium	4. 4	1. 0	+ 7. 5	+ . 012	− . 003	− . 056	37	+ . 032	83	− . 021	----
θ Ceti	3. 8	1. 3	− 8. 6	− . 010	− . 014	− . 020	66	+ . 019	132	+ . 013	D
η Piscium	3. 7	1. 5	+14. 9	+ . 008	+ . 001	− . 021	44	+ . 032	101	+ . 010	D
ν Piscium	4. 7	1. 6	+ 5. 1	+ . 009	+ . 002	− . 057	32	+ . 033	64	− . 026	----
ο Piscium	4. 5	1. 7	+ 8. 8	+ . 003	− . 005	− . 050	42	+ . 021	82	− . 024	----
ζ Ceti	3. 9	1. 8	−10. 7	− . 009	− . 008	− . 046	27	+ . 030	74	− . 008	----
ξ Piscium	4. 8	1. 8	+ 2. 8	+ . 008	− . 005	− . 053	24	+ . 022	45	− . 026	----
β Arietis	2. 7	1. 8	+20. 4	− . 012	− . 011	− . 019	23	+ . 021	58	+ . 013	D
α Arietis	2. 2	2. 0	+23. 1	+ . 004	− . 002	− . 042	49	+ . 026	104	− . 014	D

Right Ascensions of the Clock Stars—Continued

Star	Mag.	R. A.	Decl.	Def.–Prel.	Def.–Ei.	Def.–N.	No. Obs.	Cat.–Ei.	No. Obs.	Cat.–N.	Day
		h	°	s	s	s		s		s	
ξ^1 Ceti	4.5	2.1	+ 8.5	+0.002	−0.006	−0.060	40	+0.026	81	−0.028	----
67 Ceti	5.7	2.2	− 6.8	+ .018	.000	− .014	32	+ .033	73	+ .019	----
ξ^2 Ceti	4.3	2.4	+ 8.1	+ .006	− .004	− .046	42	+ .031	88	− .011	D
δ Ceti	4.0	2.6	0.0	− .006	− .007	− .064	40	+ .023	89	− .034	----
μ Ceti	4.4	2.7	+ 9.8	+ .007	+ .005	− .023	32	+ .030	74	+ .002	----
σ Arietis	5.5	2.8	+14.8	+ .007	+ .008	− .046	32	+ .041	71	− .013	----
η Eridani	4.0	2.9	− 9.2	+ .010	+ .014	− .060	33	+ .042	76	− .032	----
α Ceti	2.8	3.0	+ 3.8	+ .003	− .002	− .028	21	+ .026	45	.000	D
δ Arietis	4.5	3.1	+19.4	.000	− .002	− .063	28	+ .021	63	− .040	----
ζ Arietis	5.0	3.2	+20.7	+ .004	+ .002	− .053	40	+ .034	72	− .021	----
ο Tauri	3.8	3.3	+ 8.7	− .001	+ .001	− .042	33	+ .027	85	− .016	D
ξ Tauri	3.8	3.4	+ 9.5	− .002	+ .003	− .059	29	+ .034	54	− .028	----
f Tauri	4.3	3.4	+12.7	.000	− .004	− .069	31	+ .026	46	− .039	----
δ Eridani	3.7	3.7	−10.0	− .033	− .015	− .076	42	+ .018	67	− .043	----
η Tauri	3.0	3.7	+23.9	+ .012	− .001	− .058	40	+ .031	76	− .026	D
γ Eridani	3.2	3.9	−13.7	− .011	+ .004	− .057	48	+ .030	81	− .031	----
ν Tauri	3.9	4.0	+ 5.8	− .009	+ .003	− .075	48	+ .031	92	− .047	----
o^1 Eridani	4.1	4.1	− 7.0	− .001	+ .003	− .065	30	+ .031	50	− .037	----
γ Tauri	3.9	4.3	+15.4	− .004	+ .009	− .068	30	+ .035	50	− .042	----
δ Tauri	3.9	4.3	+17.4	− .004	.000	− .056	32	+ .024	63	− .032	----
ε Tauri	3.6	4.4	+19.0	− .011	+ .001	− .077	31	+ .029	72	− .049	D
α Tauri	1.1	4.5	+16.3	− .018	− .003	− .040	49	+ .028	90	− .009	D
τ Tauri	4.3	4.6	+22.8	− .003	+ .003	− .085	39	+ .025	73	− .063	----
μ Eridani	4.2	4.7	− 3.4	− .008	− .008	− .078	36	+ .028	70	− .042	----
π^5 Orionis	3.9	4.8	+ 2.3	− .007	+ .005	− .071	52	+ .039	74	− .037	----
β Eridani	2.9	5.1	− 5.2	− .023	− .007	− .091	49	+ .025	94	− .059	----
β Orionis	0.3	5.2	− 8.3	− .010	+ .001	− .022	51	+ .034	103	+ .011	D
τ Orionis	3.7	5.2	− 6.9	.000	+ .005	− .055	36	+ .037	81	− .023	----
γ Orionis	1.7	5.3	+ 6.3	+ .008	+ .006	− .046	25	+ .041	52	− .011	----
β Tauri	1.8	5.4	+28.5	− .020	− .008	− .070	27	+ .022	52	− .040	D
δ Orionis	2.5	5.5	− 0.4	.000	+ .003	− .045	30	+ .033	76	− .015	D
ε Orionis	1.8	5.5	− 1.3	+ .002	+ .007	− .039	24	+ .034	48	− .012	D
κ Orionis	2.2	5.7	− 9.7	− .016	− .016	− .056	49	+ .015	102	− .025	D
α Orionis	1.0–1.4	5.8	+ 7.4	− .008	+ .001	− .048	48	+ .029	95	− .020	D
ν Orionis	4.4	6.1	+14.8	− .016	− .006	− .121	44	+ .029	82	− .086	----
μ Geminorum	3.2	6.3	+22.4	− .011	+ .003	− .079	53	+ .031	93	− .051	----
ν Geminorum	4.1	6.4	+20.3	+ .006	+ .005	− .050	59	+ .038	110	− .017	----
γ Geminorum	1.9	6.6	+16.5	+ .003	+ .005	− .064	48	+ .037	89	− .032	D
ε Geminorum	3.2	6.7	+25.2	− .002	+ .006	− .065	54	+ .037	93	− .034	D
ξ Geminorum	3.4	6.7	+13.0	− .009	+ .004	− .068	51	+ .037	79	− .035	--
θ Can. Maj	4.2	6.8	−11.9	+ .008	+ .015	− .065	52	+ .044	81	− .036	----
ζ Geminorum	3.7–4.3	7.0	+20.7	− .012	− .001	− .079	42	+ .033	79	− .045	--
λ Geminorum	3.6	7.2	+16.7	− .013	− .001	− .086	40	+ .031	78	− .054	--
δ Geminorum	3.5	7.3	+22.1	+ .002	+ .020	− .095	39	+ .045	66	− .070	---
ι Geminorum	3.9	7.3	+28.0	− .012	+ .002	− .085	56	+ .030	92	− .057	----

Right Ascensions of the Clock Stars—Continued

Star	Mag.	R. A.	Decl.	Def.–Prel.	Def.–Ei.	Def.–N.	No. Obs.	Cat.–Ei.	No. Obs.	Cat.–N.	Day
		h	°	s	s	s		s		s	
β Can. Min	3.1	7.4	+ 8.5	+0.017	+0.018	−0.067	49	+0.047	82	−0.038	D
25 Monocerotis	5.2	7.6	− 3.9	+ .036	+ .024	+ .001	50	+ .061	83	+ .038	----
κ Geminorum	3.7	7.7	+24.6	− .021	.000	− .110	43	+ .037	77	− .073	----
β Geminorum	1.2	7.7	+28.2	− .006	+ .005	− .064	37	+ .031	66	− .038	D
4 Puppis	5.1	7.7	−14.4	+ .010	+ .023	− .046	46	+ .050	74	− .019	----
β Cancri	3.8	8.2	+ 9.4	+ .006	+ .015	− .030	61	+ .048	124	+ .003	D
30 Monocerotis	4.0	8.4	− 3.6	− .007	+ .002	− .086	49	+ .032	98	− .056	----
η Cancri	5.5	8.5	+20.7	− .014	− .001	− .096	43	+ .026	101	− .069	----
γ Cancri	4.7	8.6	+21.8	− .014	− .002	− .092	44	+ .028	85	− .062	----
δ Cancri	4.2	8.7	+18.4	− .002	− .002	− .080	34	+ .031	61	− .047	----
ε Hydræ	3.5	8.7	+ 6.7	− .012	− .002	− .066	42	+ .027	80	− .037	D
ζ Hydræ	3.3	8.9	+ 6.3	− .015	.000	− .096	38	+ .035	59	− .061	D
α Cancri	4.3	8.9	+12.2	− .001	+ .004	− .073	43	+ .033	76	− .044	----
κ Cancri	5.1	9.1	+11.0	− .005	− .004	− .084	48	+ .027	97	− .053	----
θ Hydræ	3.8	9.2	+ 2.7	− .002	+ .001	− .072	53	+ .035	112	− .038	----
α Hydræ	2.2	9.4	− 8.3	+ .011	+ .007	− .037	45	+ .035	82	− .009	D
ξ Leonis	5.1	9.5	+11.7	− .010	− .010	− .072	31	+ .022	52	− .040	----
ο Leonis	3.8	9.6	+10.3	− .001	.000	− .066	49	+ .032	91	− .034	----
ε Leonis	3.1	9.7	+24.1	− .010	− .005	− .057	44	+ .026	90	− .026	D
π Leonis	4.9	9.9	+ 8.4	+ .013	+ .009	− .031	47	+ .044	95	+ .004	----
α Leonis	1.3	10.1	+12.4	− .006	+ .006	− .041	55	+ .033	93	− .014	D
λ Hydræ	3.8	10.1	−12.0	− .003	+ .007	− .054	53	+ .033	84	− .028	----
ζ Leonis	3.6	10.2	+23.8	− .004	+ .001	− .066	57	+ .031	100	− .036	D
ρ Leonis	3.8	10.5	+ 9.7	− .001	+ .005	− .064	55	+ .033	107	− .036	----
41 Leo. Min	5.0	10.7	+23.6	− .010	− .004	− .073	47	+ .027	105	− .042	----
l Leonis	5.3	10.8	+11.0	− .004	+ .004	− .086	31	+ .030	60	− .060	----
ν Hydræ	3.3	10.8	−15.8	− .001	+ .008	− .007	25	+ .039	53	+ .024	D
d Leonis	5.0	10.9	+ 4.0	+ .023	+ .009	− .032	37	+ .039	90	− .002	----
χ Leonis	4.7	11.0	+ 7.8	+ .025	+ .015	− .041	38	+ .049	87	− .007	----
δ Leonis	2.6	11.2	+21.0	− .013	− .007	− .089	41	+ .027	100	− .055	D
σ Leonis	4.1	11.3	+ 6.5	+ .007	+ .001	− .067	41	+ .034	82	− .034	----
τ Leonis	5.2	11.4	+ 3.3	+ .008	− .001	− .051	46	+ .034	83	− .016	----
υ Leonis	4.5	11.5	− 0.4	+ .016	+ .009	− .040	36	+ .036	65	− .013	----
β Leonis	2.2	11.7	+15.0	+ .007	+ .003	− .055	42	+ .029	99	− .029	D
β Virginis	3.8	11.8	+ 2.2	− .001	+ .001	− .045	38	+ .029	71	− .017	----
π Virginis	4.6	11.9	+ 7.1	+ .007	− .007	− .028	44	+ .030	96	+ .009	----
ο Virginis	4.2	12.0	+ 9.2	− .010	− .010	− .065	54	+ .020	106	− .035	----
η Virginis	4.0	12.3	− 0.2	− .014	− .002	− .085	42	+ .032	69	− .051	----
24 Comæ	5.2	12.5	+18.8	+ .008	+ .005	− .053	66	+ .037	120	− .021	----
χ Virginis	4.8	12.6	− 7.6	+ .033	+ .010	− .029	38	+ .046	72	+ .007	----
ρ Virginis	5.0	12.6	+10.7	− .006	− .001	− .083	37	+ .032	62	− .050	----
δ Virginis	3.7	12.9	+ 3.8	+ .001	− .006	− .041	37	+ .029	86	− .006	----
ε Virginis	3.0	13.0	+11.4	+ .013	+ .010	− .042	31	+ .035	66	− .017	D
θ Virginis	4.4	13.1	− 5.1	+ .031	+ .019	− .011	44	+ .045	77	+ .015	----
α Virginis	1.2	13.3	−10.7	+ .001	− .002	− .035	67	+ .029	112	− .004	D

Right Ascensions of the Clock Stars—Continued

Star	Mag.	R. A.	Decl.	Def.–Prel.	Def.–Ei.	Def.–N.	No. Obs.	Cat.–Ei.	No. Obs.	Cat.–N.	Day
		h	°	s	s	s		s		s	
ζ Virginis	3.4	13.5	− 0.2	−0.003	−0.012	−0.035	35	+0.024	65	+0.001	----
m Virginis	5.2	13.6	− 8.3	+ .005	− .005	− .034	42	+ .026	72	− .003	----
τ Bootis	4.5	13.7	+17.9	− .005	− .007	− .050	59	+ .021	117	− .022	----
η Bootis	2.8	13.8	+18.8	− .004	− .003	− .072	57	+ .025	97	− .044	D
τ Virginis	4.3	14.0	+ 1.9	.000	− .010	− .062	53	+ .026	109	− .026	----
κ Virginis	4.3	14.1	− 9.9	− .007	− .014	− .075	34	+ .025	70	− .036	----
α Bootis	0.2	14.2	+19.6	− .009	− .010	− .043	38	+ .018	70	− .015	D
λ Virginis	4.6	14.2	−13.0	+ .016	+ .001	− .004	43	+ .031	64	+ .026	----
f Bootis	5.4	14.4	+19.6	+ .004	+ .007	− .062	35	+ .038	64	− .031	----
μ Virginis	4.0	14.6	− 5.3	+ .005	+ .007	− .053	38	+ .033	76	− .027	----
ε Bootis	2.7	14.7	+27.4	− .011	− .006	− .073	26	+ .028	48	− .039	D
109 Virginis	3.8	14.7	+ 2.2	− .007	+ .002	− .066	21	+ .031	46	− .037	----
α Libræ	2.9	14.8	−15.7	+ .014	+ .013	− .004	30	+ .034	66	+ .017	D
ξ² Libræ	5.6	14.9	−11.1	+ .006	− .005	− .016	38	+ .032	75	+ .021	----
3 Serpentis	5.4	15.2	+ 5.2	+ .013	+ .006	− .045	48	+ .035	81	− .016	----
β Libræ	2.7	15.2	− 9.1	− .011	− .005	− .051	49	+ .025	78	− .021	D
γ Libræ	4.0	15.5	−14.5	+ .003	+ .001	− .076	41	+ .029	65	− .048	----
α Cor. Bor.	2.3	15.5	+27.0	+ .004	− .001	− .065	36	+ .029	62	− .035	D
α Serpentis	2.8	15.7	+ 6.7	− .003	+ .002	− .042	43	+ .030	77	− .014	D
β Serpentis	3.7	15.7	+15.7	− .014	+ .003	− .116	40	+ .034	70	− .085	----
μ Serpentis	3.6	15.8	− 3.2	− .005	+ .002	− .033	40	+ .028	61	− .007	----
ε Serpentis	3.8	15.8	+ 4.7	− .020	− .006	− .041	46	+ .022	71	− .013	----
γ Serpentis	3.9	15.9	+15.9	− .021	− .005	− .079	69	+ .024	109	− .048	----
δ Ophiuchi	3.0	16.2	− 3.5	− .001	+ .002	− .037	45	+ .028	90	− .011	D
ε Ophiuchi	3.3	16.2	− 4.5	− .013	− .009	− .046	40	+ .021	69	− .016	----
γ Herculis	3.8	16.3	+19.3	+ .006	+ .010	− .058	64	+ .037	121	− .031	----
β Herculis	2.8	16.4	+21.7	− .001	.000	− .020	63	+ .031	100	+ .011	D
ζ Ophiuchi	2.7	16.5	−10.4	− .003	− .005	− .036	60	+ .023	108	− .008	D
κ Ophiuchi	3.4	16.9	+ 9.5	− .005	+ .006	− .036	57	+ .033	94	− .009	D
α Herculis	3.1-3.9	17.2	+14.5	+ .009	+ .001	− .046	50	+ .032	96	− .015	----
δ Herculis	3.2	17.2	+24.9	− .006	+ .003	− .052	55	+ .033	99	− .022	D
σ Ophiuchi	4.4	17.4	+ 4.2	− .001	− .001	− .077	59	+ .036	129	− .040	----
α Ophiuchi	2.1	17.5	+12.6	+ .005	.000	− .046	61	+ .029	126	− .017	D
β Ophiuchi	2.9	17.7	+ 4.6	+ .003	+ .004	− .056	51	+ .033	109	− .027	D
μ Herculis	3.5	17.7	+27.8	+ .007	+ .015	− .052	69	+ .042	138	− .025	----
ν Ophiuchi	3.5	17.9	− 9.8	− .013	− .009	− .033	60	+ .021	125	− .001	----
72 Ophiuchi	3.7	18.1	+ 9.6	− .004	− .009	− .040	62	+ .023	126	− .008	D
η Serpentis	3.4	18.3	− 2.9	.000	− .008	− .005	76	+ .028	120	+ .031	
109 Herculis	3.9	18.3	+21.7	+ .001	− .001	− .060	83	+ .030	135	− .029	
1 Aquilæ	4.1	18.5	− 8.3	+ .004	− .008	− .035	77	+ .022	141	− .005	
110 Herculis	4.3	18.7	+20.5	+ .023	+ .012	+ .004	81	+ .042	155	+ .034	
θ Serpentis	4.5	18.9	+ 4.1	+ .005	− .005	− .032	59	+ .032	105	+ .005	
ζ Aquilæ	3.0	19.0	+13.7	+ .002	.000	− .033	69	+ .030	125	− .003	D
ω Aquilæ	5.1	19.2	+11.5	+ .011	+ .005	− .057	54	+ .038	101	− .024	
δ Aquilæ	3.4	19.4	+ 3.0	− .003	− .006	− .034	66	+ .025	133	− .003	----

Right Ascensions of the Clock Stars—Continued

Star	Mag.	R. A.	Decl.	Def.–Prel.	Def.–Ei.	Def.–N.	No. Obs.	Cat.–Ei.	No. Obs.	Cat.–N.	Day
		h	°	s	s	s		s		s	
β Cygni	3. 2	19. 5	+27. 8	−0. 004	−0. 003	−0. 049	61	+0. 029	118	−0. 017	D
κ Aquilæ	5. 0	19. 5	− 7. 2	− . 010	− . 007	− . 074	53	+ . 026	97	− . 041	----
γ Aquilæ	2. 8	19. 7	+10. 4	+ . 006	− . 001	− . 023	63	+ . 026	112	+ . 004	D
α Aquilæ	0. 9	19. 8	+ 8. 7	− . 004	+ . 004	− . 018	77	+ . 033	127	+ . 011	D
β Aquilæ	3. 9	19. 9	+ 6. 2	− . 010	− . 002	− . 030	63	+ . 029	101	+ . 001	----
γ Sagittæ	3. 7	19. 9	+19. 3	+ . 006	+ . 006	− . 023	56	+ . 032	87	+ . 003	----
θ Aquilæ	3. 4	20. 1	− 1. 1	− . 007	− . 007	− . 022	60	+ . 025	110	+ . 010	----
α² Capricorni	3. 8	20. 2	−12. 8	. 000	− . 004	− . 018	58	+ . 029	101	+ . 015	D
ε Delphini	4. 0	20. 5	+11. 0	+ . 005	+ . 005	− . 048	74	+ . 034	121	− . 019	----
α Delphini	3. 9	20. 6	+15. 6	− . 020	− . 005	− . 068	66	+ . 021	114	− . 042	D
ε Aquarii	3. 8	20. 7	− 9. 8	+ . 011	+ . 002	− . 016	55	+ . 032	94	+ . 014	----
μ Aquarii	4. 8	20. 8	− 9. 3	+ . 007	− . 009	− . 031	48	+ . 026	83	+ . 004	----
ν Aquarii	4. 5	21. 1	−11. 7	+ . 001	− . 012	− . 009	64	+ . 020	124	+ . 023	----
α Equulei	4. 1	21. 2	+ 4. 9	+ . 001	− . 014	− . 034	52	+ . 018	98	− . 002	----
1 Pegasi	4. 2	21. 3	+19. 5	+ . 007	− . 001	− . 067	66	+ . 027	131	− . 039	----
β Aquarii	3. 1	21. 5	− 5. 9	+ . 012	+ . 002	− . 021	48	+ . 028	84	+ . 005	D
ξ Aquarii	4. 8	21. 6	− 8. 2	+ . 011	− . 002	− . 037	61	+ . 029	119	− . 006	----
ε Pegasi	2. 5	21. 7	+ 9. 5	+ . 001	− . 007	− . 031	67	+ . 022	130	− . 002	D
μ Capricorni	5. 2	21. 8	−13. 9	+ . 007	− . 010	+ . 003	45	+ . 020	89	+ . 033	----
α Aquarii	3. 2	22. 0	− 0. 7	+ . 006	− . 006	− . 029	45	+ . 026	93	+ . 003	D
θ Pegasi	3. 7	22. 1	+ 5. 8	− . 018	− . 015	− . 075	50	+ . 019	94	− . 041	----
θ Aquarii	4. 3	22. 2	− 8. 2	+ . 020	+ . 005	− . 006	39	+ . 034	82	+ . 023	----
γ Aquarii	4. 0	22. 3	− 1. 8	+ . 018	. 000	− . 014	46	+ . 028	99	+ . 014	----
σ Aquarii	4. 9	22. 4	−11. 1	− . 008	− . 014	− . 057	39	+ . 010	65	− . 031	----
η Aquarii	4. 1	22. 5	− 0. 5	+ . 009	− . 005	− . 030	44	+ . 027	90	+ . 002	----
ζ Pegasi	3. 6	22. 6	+10. 4	− . 004	− . 003	− . 057	34	+ . 030	67	− . 024	----
λ Pegasi	4. 1	22. 7	+23. 1	+ . 002	− . 011	− . 051	34	+ . 022	75	− . 018	----
λ Aquarii	3. 8	22. 8	− 8. 0	+ . 006	. 000	− . 024	30	+ . 032	53	+ . 008	----
α Pegasi	2. 6	23. 0	+14. 8	+ . 006	− . 005	− . 037	46	+ . 026	100	− . 006	D
φ Aquarii	4. 4	23. 2	− 6. 5	+ . 013	− . 006	− . 011	42	+ . 028	83	+ . 023	----
γ Piscium	3. 8	23. 2	+ 2. 8	− . 005	− . 009	− . 025	35	+ . 026	76	+ . 010	----
υ Pegasi	4. 6	23. 4	+23. 0	+ . 028	+ . 015	− . 040	34	+ . 042	85	− . 013	----
κ Piscium	4. 9	23. 4	+ 0. 8	− . 007	− . 016	− . 065	21	+ . 023	54	− . 026	----
ι Piscium	4. 3	23. 6	+ 5. 2	+ . 005	− . 007	− . 037	36	+ . 027	91	− . 003	D
φ Pegasi	5. 2	23. 8	+18. 7	+ . 008	− . 011	− . 038	42	+ . 025	118	− . 002	----
ω Piscium	4. 0	23. 9	+ 6. 4	− . 012	− . 007	− . 053	38	+ . 025	92	− . 021	D

Additional Stars for Day Work

Star	Mag.	R. A.	Decl.	Def.–Ei.	Def.–N.	No. Obs.	Cat.–Ei.	No. Obs.	Cat.–N.	Day
		h	°	s	s		s		s	
β Ceti	2.2	0.7	−18.4	−0.006	−0.011	27	+0.021	28	+0.016	D
β Andromedæ	2.4	1.1	+35.2	− .032	− .084	19	− .003	19	− .055	D
41 Arietis	3.7	2.8	+26.9	+ .001	− .055	16	+ .032	16	− .024	D
ζ Persei	2.9	3.8	+31.6	+ .006	− .063	20	+ .041	19	− .028	D
π³ Orionis	3.3	4.8	+ 6.8	− .007	− .049	19	+ .019	18	− .023	D
ι Aurigæ	2.9	4.9	+33.0	− .014	− .090	9	+ .019	10	− .057	D
ζ Orionis	2.0	5.6	− 2.0	+ .009	− .062	18	+ .041	18	− .030	D
β Can. Maj	2.0	6.3	−17.9	+ .036	− .014	15	+ .069	15	+ .019	D
α Can. Maj	−1.6	6.7	−16.6	− .010	− .016	22	+ .022	22	+ .016	D
θ Geminorum	3.6	6.8	+34.1	+ .003	− .140	18	+ .037	18	− .106	D
ε Can. Maj	1.6	6.9	−28.9	+ .025	− .031	23	+ .052	24	− .004	D
δ Can. Maj	2.0	7.1	−26.3	+ .037	+ .044	18	+ .063	18	+ .070	D
α² Geminorum	2.0	7.5	+32.1	− .034	− .085	26	− .001	26	− .052	D
α Can. Min	0.5	7.6	+ 5.4	− .007	− .044	25	+ .025	25	− .012	D
40 Lyncis	3.3	9.3	+34.7	− .022	− .081	22	+ .010	24	− .049	D
ν Urs. Maj	3.7	11.2	+33.5	− .002	− .099	13	+ .029	14	− .068	D
γ Corvi	2.8	12.2	−17.1	+ .005	− .016	11	+ .026	11	+ .005	D
α² Can. Ven	2.9	12.9	+38.8	− .038	− .081	9	− .009	10	− .052	D
γ Bootis	3.0	14.5	+38.7	− .017	− .113	15	+ .016	15	− .080	D
δ Scorpii	2.5	15.9	−22.4	+ .024	− .003	17	+ .042	17	+ .015	D
α Scorpii	1.2	16.4	−26.3	+ .023	− .005	16	+ .043	15	+ .015	D
η Ophiuchi	2.6	17.1	−15.6	.000	+ .013	34	+ .027	33	+ .040	D
α Lyræ	0.1	18.6	+38.7	− .012	− .077	48	+ .012	49	− .053	D
σ Sagittarii	2.1	18.8	−26.4	+ .019	+ .070	34	+ .038	34	+ .089	D
γ Lyræ	3.3	18.9	+32.6	+ .003	− .050	49	+ .028	51	− .025	D
ε Cygni	2.6	20.7	+33.7	− .012	− .115	32	+ .014	32	− .089	D
ζ Cygni	3.4	21.2	+29.9	− .015	− .071	33	+ .015	32	− .041	D
η Pegasi	3.1	22.7	+29.8	− .001	− .072	14	+ .029	14	− .042	D
μ Pegasi	3.7	22.8	+24.2	+ .003	− .083	23	+ .033	23	− .053	D
α Pis. Aus	1.3	22.9	−30.0	+ .040	+ .034	39	+ .060	39	+ .054	D

Definitive clock corrections.—The corrections to the Ephemeris for the clock stars were taken as constant, i. e. NEWCOMB's motions were used, and all the preliminary clock corrections 1913.6–1923.3 were revised, using these definitive positions, and the clock corrections 1923.3–1926.5 were computed directly by using them, and these definitive clock corrections were entered on the regular reduction sheets for the whole work. There were altogether 2,480 such clock corrections, including some 16,000 observations of the clock stars, giving an average of 6.5 stars per clock correction, the probable error of which was ± $0^{s}.0076$. This error was deduced using internal residuals and it represents the error effecting the right ascensions so far as the clock corrections go. External residuals were also given by the intercomparison of clock corrections from one observer to the next, such differences including errors of constants, relative equations, and clock rates; also a comparison was made of the clock corrections taken on two separate instruments, the 9-inch and 6-inch transit circles, in the five years 1913.5–1918.5. (See *Astr. Jour.* No. 817.) The probable error of a clock correction from such external residuals is ±$0^s.014$. This represents the error affecting time signals or longitude work, and not right ascensions.

All observations for the positions of stars in the catalogue were made at night and were reduced with clock corrections taken at the same time by the same observer, with consequent elimination of personal equation and instrumental constants in the equatorial zone. Observations of the Moon and outer planets were also made by one of the night observers and were reduced with clock corrections taken at the same time by the same observer.

For the Sun, Mercury, Venus, and day stars it was considered that the clock rate and any differences between night and day observations were known so that clock corrections could be better determined from night work than from the day stars. The reductions were made using means of a number of clock corrections taken on nights preceding and following the day observations. These normals extended over a number of days, and were used to reduce the observations on all the days within or just at the end of the group. Occasionally day observations were reduced when but two or three clock corrections were taken within a number of days of them, but if possible including them. The night clock corrections so used were corrected for relative personal equation to the day observer as if he were working at night. The differences between day and night observations and the personal equations between the Sun and day stars are considered later. The reduction of the day star work with night clock corrections was for purposes of investigation of such differences only. No observations of the stars in daytime were kept for position. This method of reduction allowed the use of Sun observations on days when no stars or an insufficient number of stars were taken, and it also allowed the use of all day star observations for determining the difference night minus day. The final mean position of the Sun is the same as it would have been if reduced with clock corrections taken from day stars each day, but the accidental position of the Sun for each day is less.

PERSONAL EQUATION IN RIGHT ASCENSION

The personal equation machine.—The personal equation machine was used throughout this series of observations for determining the absolute personal equation of each observer for all objects under observation, over 700 sets of measures having been taken in the 12 years. As described on page A xv, Volume IX, Part I, this machine is mounted on the pier of the north mark, operating at the focus of the mark lens, and the artificial stars, or other objects, are observed with the transit circle, as in regular observations, the only difference being that the observer uses the transit circle in a horizontal position and not pointing upward. An artificial ninth magnitude star is observed at night moving with speeds corresponding to the daily motion of stars at different declinations from 0° to 89°. Images of the Moon's limb and of the outer planets are observed at night, and images of the Sun's limb and a day star are observed in bright sunlight with bright field, the 400 feet of hot air between the instrument and the machine causing the images to "boil," as in real observations. In the table, group means are given for corrections to times of transit at the three different declinations for which the machine was set for chronograph stars, and three for eye and ear stars, and for other objects at equatorial motion.

For the stars the variation with declination was represented by expressions of the form $x+y \sec \delta$, for chronograph, and eye and ear stars separately, and the corresponding corrections for the clock corrections are given in column 7. As all observations were reduced with the observer's own clock correction the corrections to the right ascensions are the differences between the corrections to time of transit for an object and for a clock star, and therefore vanish for the stars in the clock region. The expressions for the corrections to the right ascensions, and also the values at certain declinations, are given in the right-hand side of the table. As the machine operates the same for different observers and for different objects such as the Sun or star, possible errors in the machine are eliminated in the differences in equatorial regions. In part of the observations of the Moon the star was observed at the same time, the difference giving at once the correction to the right ascension. In actual observations of the day stars near the Sun the field is very bright, and very little screen can be used. The stars are hard to see, not because the image is small, but because the field is so bright. Such images are large and "fuzzy" and the personal equation should correspond to bright stars, the observed transit being early. This is borne out by the machine results, the observer being earlier than the night stars in every case. The difference between actual observations of day and night stars gave this same result also.

Results of Measures on the Personal Equation Machine

Stars Key and Chronograph, Decl. 0° to 85°

Obsr.	1900+	No. nights	Corr. to time of transit			Corr. to Clk. Corr.	Corr. to R. A.	Corr. to R. A. at—	
			0°	66°	82°			39°	82°
			s	s	s	s	s	s	s
M	13. 6-18. 6	16	–0. 069	–0. 071	–0. 123	+0. 066	–0. 008 ($\sec \delta-1$)	–0. 002	–0. 05
M	19. 8–24. 5	10	– . 061	– . 071	– . 130	+ . 059	– . 011 "	– . 003	– . 07
P	13. 6–15. 4	11	– . 073	– . 065	– . 084	+ . 071	– . 001 "	. 000	– . 01
P	16. 0–18. 5	11	– . 023	– . 023	+ . 034	+ . 027	+ . 008 "	+ . 002	+ . 05
P	20. 3–24. 4	8	– . 053	– . 038	+ . 031	+ . 054	+ . 014 "	+ . 004	+ . 08
Ep	13. 6–14. 2	7	– . 277	– . 309	– . 369	+ . 280	– . 016 "	– . 005	– . 10
S	14. 4–15. 4	8	– . 147	– . 177	– . 230	+ . 149	– . 014 "	– . 004	– . 09
S	16. 0–17. 3	5	– . 104	– . 123	– . 104	+ . 108	– . 001 "	. 000	– . 01
Sr	14. 5–16. 6	10	– . 118	– . 110	– . 156	+ . 114	– . 005 "	– . 001	– . 03
Sr	17. 5–19. 8	10	– . 072	– . 097	– . 144	+ . 073	– . 012 "	– . 004	– . 08
Bn	20. 4–24. 5	8	– . 063	– . 109	– . 260	+ . 063	– . 033 "	– . 009	– . 20
Ry	20. 4–25. 5	11	– . 117	– . 137	– . 056	+ . 124	+ . 008 "	+ . 002	+ . 05

Stars Eye and Ear, Decl. 85° to 90°

Obsr.	1900+	No. nights	Corr. to time of transit			Corr. to R. A.	Corr. to R. A. at—	
			85°	87°.4	88°.7		85°	88°
			s	s	s	s s	s	s
M	13. 6–17. 6	13	−0. 10	−0. 06	−0. 06	−0. 047 +0. 002 sec δ	−0. 03	0. 00
M	18. 5–24. 5	6	− . 13	− . 06	+ . 10	− . 150 + . 007 "	− . 07	+ . 05
P	13. 6–17. 6	12	+ . 25	+ . 30	+ . 48	+ . 216 + . 007 "	+ . 28	+ . 41
P	18. 6–24. 5	6	+ . 18	+ . 35	+ . 48	+ . 122 + . 010 "	+ . 24	+ . 42
Ep	13. 6–13. 9	5	− . 12	+ . 05	+ . 31	+ . 016 + . 014 "	+ . 17	+ . 40
S	14. 6–17. 3	7	+ . 06	+ . 11	+ . 11	+ . 166 + . 002 "	+ . 19	+ . 23
Sr	14. 6–16. 4	6	− . 15	− . 24	− . 20	− . 021 − . 003 "	− . 05	− . 10
Sr	17. 6–19. 8	8	. 00	− . 06	+ . 16	+ . 026 + . 003 "	+ . 06	+ . 10
Bn	20. 4–25. 3	6	+ . 04	+ . 02	+ . 06	+ . 102 . 000 "	+ . 10	+ . 10
Ry	20. 5–25. 6	7	+ . 25	+ . 41	+ . 60	+ . 253 + . 012 "	+ . 39	+ . 59

Objects, Corrections to Time of Transit

Obsr.	Day stars	Sun Limbs I and II	Moon Limb I	Moon Limb II	Large Planets Limbs I and II	Small Planets Center
	s	s	s	s	s	s
M	−0. 016	+0. 064	−0. 019	0. 000	+0. 045	−0. 020
P	− . 007	− . 022	+ . 037	− . 164	− . 086	− . 047
Ep			− . 155	− . 303	− . 224	
S			− . 075	− . 106	− . 070	
Sr	− . 021	+ . 058	− . 080	− . 053	− . 024	− . 046
Bn	− . 054	− . 057	− . 040	− . 152	− . 072	− . 003
Ry	− . 077	− . 014	− . 023	− . 065	− . 037	− . 062

Relative personal equations.—The corrections to right ascensions given for the stars in the table above represent the absolute values given by the machine, but the relative equations were given more accurately by the observed right ascensions. Large numbers of star observations at different declinations were therefore differenced by observers and the resulting equations expressed as follows:

Relative Personal Equations from Observed Right Ascensions

1913. 5—18. 5		1918. 5—26. 5	
Chronograph, Decl. 0° to 85°			
	s		s
M—P	0. 000 (sec δ—1)	M—P	—0. 028 (sec δ—1)
M—S	. 000 "	M—Bn	+ . 010 "
M—Sr	+ . 005 "	M—Ry	— . 028 "
P—S	. 000 "	P—Bn	+ . 036 "
P—Sr	+ . 006 "	P—Ry	. 000 "
S—Sr	+ . 004 "	Bn—Ry	— . 035 "
Eye and Ear, Decl. 85° to 90°			
	s s		s s
M—P	—0. 148 —0. 007 sec δ	M—P	—0. 310 —0. 005 sec δ
M—S	— . 151 — . 014 "	M—Bn	— . 180 — . 001 "
M—Sr	— . 128 — . 005 "	M—Ry	— . 310 — . 002 "
P—S	— . 016 — . 007 "	P—Bn	+ . 480 — . 008 "
P—Sr	+ . 005 + . 004 "	P—Ry	— . 250 + . 009 "
S—Sr	+ . 009 + . 012 "	Bn—Ry	— . 390 + . 003 "

The absolute equations from the machine and the relative equations from the observations were then combined giving the following final results:

Corrections to Right Ascensions of Stars for Personal Equation

1913. 5—18. 5		1918. 5—26. 5	
Chronograph, Decl. 0° to 85°			
	s		s
M	—0. 004 (sec δ—1)	M	—0. 015 (sec δ—1)
P	— . 003 "	P	+ . 010 "
S	— . 004 "	Bn	— . 025 "
Sr	— . 009 "	Ry	+ . 010 "
Ep	— . 025 "		
Eye and Ear, Decl. 85° to 90°			
	s s		s s
M	—0. 026 —0. 0036 sec δ	M	—0. 122 +0. 0056 sec δ
P	+ . 122 + . 0039 "	P	+ . 209 + . 0100 "
S	+ . 128 + . 0104 "	Bn	— . 082 + . 0089 "
Sr	+ . 104 . 0000 "	Ry	+ . 313 + . 0054 "
Ep	+ . 252 — . 0048 "		

The corrections for chronograph observations were small and none were used for stars south of the zenith, and no corrections were used for chronograph stars before 1918 except for Eppes. All right ascensions were corrected in accordance with these expressions, as also expanded in the following table:

Adopted Corrections to Right Ascensions of Stars for Personal Equation

Chronograph, Decl. 0° to 85°

Decl.	1913–14	1918. 5–26. 5			
	Ep	M	P	Bn	Ry
°	s	s	s	s	s
39	−0. 007	−0. 004	+0. 003	−0. 007	+0. 003
50	− . 014	− . 008	+ . 006	− . 014	+ . 006
60	− . 025	− . 015	+ . 010	− . 025	+ . 010
70	− . 05	− . 03	+ . 02	− . 05	+ . 02
80	− . 12	− . 07	+ . 05	− . 12	+ . 05
85	− . 26	− . 15	+ . 10	− . 26	+ . 10

Eye and Ear, Decl. 85° to 90°

Decl.	1913. 5–18. 5					1918. 5–26. 5				
	M	P	Ep	S	Sr	M	P	Sr	Bn	Ry
°	s	s	s	s	s	s	s	s	s	s
85	−0. 07	+0. 17	+0. 30	+0. 25	+0. 10	−0. 06	+0. 32	+0. 10	+0. 02	+0. 37
87	− . 09	+ . 20	+ . 34	+ . 33	+ . 10	− . 02	+ . 40	+ . 10	+ . 09	+ . 42
88	− . 13	+ . 23	+ . 39	+ . 43	+ . 10	+ . 04	+ . 50	+ . 10	+ . 17	+ . 47
89	− . 23	+ . 35	+ . 53	+ . 72	+ . 10	+ . 20	+ . 78	+ . 10	+ . 43	+ . 62

In determining the corrections to the right ascensions of the Sun, Moon, and planets the relative equations were determined by differencing all observations of the objects by observers. For the machine results the corrections for transits of day stars were taken away from those for the Sun, Mercury, and Venus, and the corrections for transits of night clock stars from those of the Moon and outer planets. The combination of the corrections for relative equations from the observations and the absolute equations from the machine gave the following corrections which were applied to all observed right ascensions of the Sun, Moon, and planets.

Adopted Corrections to Right Ascensions of Objects for Personal Equation

Object	M	P	Ep	S	Sr	Bn	Ry
Sun:	s	s	s	s	s	s	s
½(I+II)	+0.090	−0.005			+0.065	−0.025	+0.070
Moon, 1913–19:							
I	+ .043	+ .053	+0.032	+0.067	+ .033		
II	+ .034	− .164	+ .106	+ .074	+ .066		
Moon, 1920–26:							
I	+ .076	+ .044				+ .027	+ .107
II	+ .068	− .141				− .084	+ .075
Mercury and Venus:							
I	+ .016	+ .049			− .039	+ .009	+ .075
II	+ .035	− .158			− .012	− .103	+ .023
Center	− .024	− .032			− .028		+ .031
Mars, Jupiter, and Saturn:							
½(I+II)	+ .070	− .040	.000	+ .070	+ .055	.000	+ .065
Uranus and Neptune:							
Center	+ .040	− .030	.000	+ .040	+ .020	+ .040	+ .055

The amount by which the Sun observations were shifted and also brought together by application of corrections for personal equation is shown in the following table, where Δα is the observed correction to the Ephemeris of the Sun.

Sun				
Obsr.	No.	Δα	Corr'n for Per. Eqn.	Δα Corr'd
		s	s	s
M	57	−0.090	+0.090	0.000
P	178	− .005	− .005	− .010
Sr	35	− .058	+ .065	+ .007
Bn	144	+ .025	− .025	.000
Ry	167	− .080	+ .070	− .010
Mean		− .030		− .005

And the planets were shifted by similar amounts. Observations of the Moon were corrected as follows:

Moon						
Obsr.	Δα		Corr'n for Per. Eqn.		Δα Corr'd	
	I	II	I	II	I	II
	s	s	s	s	s	s
M	−0.047	−0.034	+0.060	+0.051	+0.013	+0.017
P	− .025	+ .179	+ .048	− .152	+ .023	+ .027
S	− .060	− .071	+ .067	+ .074	+ .007	+ .003
Sr	− .028	− .053	+ .033	+ .066	+ .005	+ .013
Bn	− .006	+ .094	+ .027	− .084	+ .021	+ .010
Ry	− .087	− .069	+ .107	+ .075	+ .020	+ .006

That the personal equations given by the machine approximate those found in actual observations, and therefore represent real corrections needed by the observations is illustrated by the following comparisons of relative equations.

Comparison of Relative Equations from Observations and from the Machine

Obsr.	Clock Corrections		Jupiter	
	Obs.	Machine	Obs.	Machine
	s	s	s	s
M−P	−0. 003	−0. 017	−0. 13	−0. 14
M−S	+ . 104	+ . 062	. 00	− . 05
M−Sr	+ . 040	+ . 028	− . 04	− . 04
P−S	+ . 107	+ . 079	+ . 13	+ . 09
P−Sr	+ . 043	+ . 045	+ . 09	+ . 10
S−Sr	− . 060	− . 034	− . 04	+ . 01
M−P	− . 020	− . 005	− . 13	− . 14
M−Bn	+ . 047	+ . 004	− . 11	− . 10
M−Ry	+ . 076	+ . 065	. 00	− . 02
P−Bn	+ . 067	+ . 009	+ . 02	+ . 04
P−Ry	+ . 096	+ . 070	+ . 13	+ . 12
Bn−Ry	+ . 029	+ . 061	+ . 11	+ . 08

Stars, Decl. 70°			Stars, Decl. 82°		
Obsr.	Obs.	Machine	Obsr.	Obs.	Machine
	s	s		s	s
M−P	+0. 024	+0. 023	M−P	+0. 19	+0. 17
M−S	+ . 003	+ . 001	M−Bn	− . 07	− . 15
M−Sr	− . 006	− . 007	M−Ry	+ . 19	+ . 13
P−S	− . 027	− . 022	P−Bn	− . 25	− . 31
P−Sr	− . 016	− . 024	P−Ry	. 00	− . 04
S−Sr	− . 004	− . 002	Bn−Ry	+ . 24	+ . 27

The rather exhaustive investigation into and general application of the corrections to right ascension for personal equation are clearly justified by the improvement of the observations, especially for the stars at higher declinations, and for the Sun, Moon, and planets where the average result has been to increase the right ascensions, and consequently decrease the equinox by $0^{s}.020$. As explained on page 41, the application of corrections for personal equation carries the equinox in the direction indicated by observations elsewhere.

Magnitude equation.—As all stars were screened approximately to magnitude 9.5, there should be no magnitude equation for stars brighter than this. The tabulations, $\Delta\alpha_m$, page 91, which resulted from comparisons with a number of fundamental and observational catalogues where the magnitude effects were largely eliminated by use of screens, traveling threads, and corrections for magnitude equations, show that this catalogue is practically free from magnitude effects. A summary of the table, $\Delta\alpha_m$, gives the following possible variations of these right ascensions with magnitude.

Magnitude	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5
$\Delta\alpha_m$	$-0^{s}005$	$-0^{s}001$	$0^{s}000$	$+0^{s}002$	$-0^{s}003$	$-0^{s}002$	$0^{s}000$	$+0^{s}003$	$+0^{s}001$

Quite a few stars of the list were fainter than the limiting magnitude for screening. These and many of the faint stars far south were often observed near the limit of visibility especially on hazy nights. While notes as to the seeing conditions and faintness were far from uniform by different observers, some thousand such notes were found, and such observations were differenced from the others of the same stars giving corrections to the right ascensions of very faint stars as indicated below, and which are similar for different observers. Also series of measures were taken on the personal equation machine comparing transits of a star of normal magnitude with transits of a star on the limit of visibility, possibly a considerable part of a magnitude fainter. Such results indicated the observers were later on very faint observations by small amounts.

Corrections for Magnitude Equation on Very Faint Stars

Obsr.	No.	Obs.	Machine
		s	s
M	272	−0. 003	−0. 011
P	197	− . 007	− . 000
Sr	276	− . 007	− . 004
Mean		− . 006	− . 005

The two results are similar to each other and are about the size found by observers elsewhere, and the mean $-0^s.006$ was adopted. This is not a correction per magnitude, but rather a correction for all very faint observations. The Durchmusterung magnitudes of such faint stars were found uncertain as criteria for applying magnitude equation. Where three out of four observations of a star were noted as faint by the observers the right ascension has received the correction for magnitude equation, $-0^s.006$. Also the right ascensions of stars of apparent magnitude, $10.9-0.45\,(\sec Z-1)$ have received the same correction. The faint stars so corrected are indicated in the catalogue by "ft" in the column "Observed Magnitude."

Zenith observations.—For examination of discontinuity at the zenith due to the observer changing his position from head north to head south, over 700 observations were taken of stars culminating near the zenith so that they could be observed conveniently in either position of the observer. Each of the 20 lists was observed twice; that half of the list observed head north one night was observed head south the second night, and vice versa; the differences for the two nights, taken half in each direction being free from night errors of the reduction constants. As usual, the prism over the eyepiece was reversed in the middle of each observation for elimination of personal equation due to direction of motion.

Separate keys were used, head north and head south, and these keys were frequently repaired and interchanged. The differences given below, though of small weight, yet similar for all observers, are probably due to changed conditions in the keys at the two epochs, and such differences should balance out in the work as a whole. Such differences are independent of the clamp.

Zenith Observations, South minus North

	M	P	Bn	Ry	Mean
	s	s	s	s	s
Cl. W, 1921–22	−0. 002 62	−0. 015 55	−0. 005 49	0. 000 39	−0. 006
Cl. E, 1924–25	− . 045 25	− . 029 39	− . 019 32	− . 025 44	− . 030
Mean					− . 015

The comparisons with catalogues $\Delta\alpha \cos \delta$ given on page 90 were plotted, and smooth curves were drawn through them. These curves have a maximum near the zenith, but show little discontinuity there. No correction has been applied for change in the observer's position in passing through the zenith.

IRREGULARITIES OF THE PIVOTS

The pivots of the transit circle have remained unchanged since 1903. Their irregularities were measured six times from 1911 to 1927 by means of a high power axial microscope some 30 inches long, placed in the hole through either pier and brought to a sharp focus on a globule of mercury vapor condensed on a glass disk adjusted inside a pivot and over its point of bearing on the wye. The spot appeared black in a field illuminated by light coming through the opposite pivot to a ground glass near the spot. Each series of measures was the mean of a number of independent sets in each of which the instrument was set every 10 degrees around the circle, forward, and backward, to a closing point, and each pivot was measured separately.

Corrections to Mean Azimuth for Irregularities of Pivots

Unit 0^{s}001

Z. D.	1911 W.	1914 E.	1916 E.	1918 W.	1921 W.	1927 E.	Mean
°							
0	+6	+14	+10	+10	+12	+16	+11
10	+6	+1	+1	+3	+5	−15	0
20	+1	−1	+2	+2	+4	−4	+1
30	−2	−6	0	0	0	−5	−2
40	−2	−6	−5	−5	−2	−9	−5
50	0	−7	−5	−12	−8	−17	−8
60	−9	−13	−9	−14	−10	−14	−12
70	−6	−8	−9	−16	−10	−7	−9
80	−12	−6	−10	−11	−11	−5	−9
90	0	−6	0	−3	−4	+3	−2
100	−6	−8	−4	−9	−7	−10	−7
110	−3	−1	−3	−11	−16	−11	−8
120	0	+1	+4	+3	−4	−6	0
130	+3	+10	+4	+7	+7	+19	+8
140	0	+8	+5	+18	+12	+20	+10
150	+5	+13	+10	+18	+21	+22	+15
160	+9	+15	+9	+12	+17	+18	+13
170	+12	+13	+13	+12	+14	+10	+12
180	+11	+3	+2	+6	+8	+5	+6
190	+2	+5	+6	+4	0	−7	+2
200	+6	0	−1	−2	−7	−6	−2
210	−4	−2	−6	−7	−8	−13	−7
220	−6	−6	−3	−10	−9	−16	−8
230	−12	−10	−9	−12	−9	−20	−12
240	−13	−11	−14	−8	−8	+1	−9
250	−10	−6	−8	−8	−5	+6	−5
260	−4	−9	−8	−11	−1	−3	−6
270	−3	−14	−3	−8	−6	−6	−7
280	−4	−11	−5	−13	−11	−18	−10
290	+2	−7	+2	−3	−6	+2	−2
300	+2	+2	0	+5	+6	+10	+4
310	+5	+9	+9	+10	+2	0	+6
320	+8	+7	+7	+13	+7	+5	+8
330	+6	+10	+2	+11	+6	+10	+8
340	+1	+8	0	+12	+5	+10	+6
350	+2	+12	+12	+9	+13	+31	+13

Corrections to Mean Level for Irregularities of Pivots

Unit $0^{s}001$

Z. D.	1911 W.	1914 E.	1916 E.	1918 W.	1921 W.	1927 E.	Mean
°							
0	+5	+4	+3	−13	−16	−47	−10
10	+2	−2	+10	−5	−13	−17	−4
20	0	+6	+6	+10	+13	+18	+9
30	+1	+6	+3	+16	+16	+23	+11
40	+8	+6	+9	+15	+15	+20	+12
50	+5	+3	−4	+15	+10	+13	+7
60	−2	−2	−7	+12	+4	+8	+2
70	−2	−6	−9	−3	+1	+3	−2
80	−7	−5	−10	−3	−2	+5	−4
90	−14	−6	−10	−5	−8	+1	−7
100	−6	−7	−11	−15	−12	−24	−12
110	−4	−6	−2	−17	−19	−32	−13
120	−6	−3	+1	−11	−10	−15	−7
130	−2	−1	−1	−3	0	+5	0
140	+1	+4	+10	−3	+3	+7	+4
150	+1	+3	+11	0	+1	+3	+3
160	+6	+3	+8	+3	+2	+6	+5
170	+4	+2	+6	+3	+4	+1	+4
180	+8	+2	+6	+9	+5	+6	+6
190	+9	+4	+8	+7	+10	+8	+8
200	+4	+1	−2	+9	+4	+8	+4
210	+4	+1	−5	+10	+7	+10	+5
220	−2	−3	−2	+4	+8	+9	+2
230	0	−3	−7	+8	+7	+11	+3
240	−3	−9	−5	−5	−3	−20	−7
250	−5	−6	+3	−7	−10	−23	−8
260	−10	−10	−12	−11	−19	−18	−13
270	−2	+2	−4	0	−3	+2	−1
280	−4	−4	+1	−1	−4	+3	−1
290	−2	+4	−1	+2	−3	+5	+1
300	−4	+1	−5	−4	+1	+1	−2
310	−1	+3	−1	−8	+1	+5	0
320	+2	−4	−3	+2	+4	+12	+2
330	+2	−3	+3	−2	+4	+14	+3
340	+5	+1	+8	+4	+9	+14	+8
350	+6	−2	+9	−9	−7	−30	−5

The results are very accordant. Taking account of the irregularities in the determinations of the level, collimation and azimuth constants, and in the transits at various declinations, the corrections to the times of transit of the clock stars, as computed assuming the pivots perfect, as was done in all reductions, average $-0^{s}.014$ for clamp east, and $+0^{s}.018$ for clamp west. The corrections to the final right ascensions are given in the table below, and all individual right ascensions were corrected for pivot errors in accordance with these results.

Corrections to Right Ascensions for Irregularity of Pivots

Decl.	Cl. W	Cl. E	½ (W+E)	W−E
°	s	s	s	s
−36	−0. 003	−0. 023	−0. 013	+0. 020
−31	+ . 001	− . 021	− . 010	+ . 022
−21	+ . 006	− . 017	− . 006	+ . 023
−11	+ . 005	− . 008	− . 002	+ . 013
− 1	+ . 003	+ . 001	+ . 002	+ . 002
+ 9	. 000	+ . 004	+ . 002	− . 004
+19	− . 007	+ . 006	. 000	− . 013
+29	+ . 006	− . 006	. 000	+ . 012
+39	+ . 010	− . 014	− . 002	+ . 024
+49	+ . 001	− . 010	− . 004	+ . 011
+59	− . 023	+ . 014	− . 004	− . 037
+69	− . 03	+ . 01	− . 01	− . 04
+79	− . 05	. 00	− . 02	− . 05
+89	− . 04	. 00	− . 02	− . 04
+81 S. P.	− . 04	. 00	− . 02	− . 04
+71 S. P.	− . 03	− . 02	− . 02	− . 01
+66 S. P.	− . 02	− . 03	− . 02	+ . 01

CLAMP DIFFERENCE

By examination of some 20,000 observations about equally divided into two epochs, mean clamp differences in right ascension were formed for different declinations as tabulated below, the observations being uncorrected for pivot errors. With the differences are given the corresponding corrections for pivot errors derived from the table above.

Clamp Differences in Right Ascensions

1913–18				1918–26			
Decl.	W−E	Corr. for Pivots	W−E Corr'd	Decl.	W−E	Corr. for Pivots	W−E Corr'd
° °	s	s	s	° °	s	s	s
−36 to −25	−0. 021	+0. 022	+0. 001	−30 to −20	−0. 030	+0. 023	−0. 007
−24 to −15	− . 016	+ . 022	+ . 006	−20 to −15	− . 023	+ . 020	− . 003
−16 to − 0	− . 004	+ . 010	+ . 006	−15 to −10	− . 016	+ . 015	− . 001
0 to +13	− . 002	− . 002	− . 004	−10 to − 5	− . 013	+ . 009	− . 004
+13 to +29	+ . 004	− . 008	− . 004	− 5 to − 0	− . 003	+ . 003	. 000
+26 to +38	− . 010	+ . 015	+ . 005	0 to + 5	− . 003	. 000	− . 003
+40 to +49	− . 009	+ . 017	+ . 008	+ 5 to +10	− . 002	− . 004	− . 006
+50 to +59	+ . 016	− . 020	− . 004	+10 to +15	+ . 006	− . 008	− . 002
+60 to +65	+ . 01	− . 04	− . 03	+15 to +20	+ . 011	− . 012	− . 001
+66 to +74	+ . 02	− . 04	− . 02	+20 to +25	+ . 014	− . 004	+ . 010
+75 to +84	+ . 01	− . 05	− . 04	+25 to +30	− . 006	+ . 008	+ . 002
+83	+ . 02	− . 04	− . 02	+30 to +38	− . 026	+ . 019	− . 007
+87	− . 04	− . 04	− . 08	+34 to +44	− . 035	+ . 024	− . 011
+87 S. P.	+ . 03	− . 04	− . 01	+83	+ . 08	− . 05	+ . 03
+83 S. P.	+ . 03	− . 04	− . 01	+87	+ . 14	− . 04	+ . 10
+84 to +75 S. P.	. 00	− . 03	− . 03	+87 S. P.	+ . 18	− . 04	+ . 14
+74 to +66 S. P.	− . 01	. 00	− . 01	+83 S. P.	+ . 04	− . 04	. 00

The clamp differences are nearly all due to the pivots, and accordingly all observations were corrected for pivot errors and there were no additional clamp terms, as shown by the following table of smoothed values.

Clamp Differences in Right Ascensions

1913–26			
Decl.	W−E, Corr'd	Decl.	W−E, Corr'd
° °	s	° °	s
−30 to −20	−0.003	+30 to +40	0.000
−20 to −10	+ .002	+40 to +50	.000
−10 to 0	− .001	+50 to +60	− .004
0 to +10	− .004	+60 to +70	− .02
+10 to +20	− .003	+70 to +80	− .03
+20 to +30	+ .003	+80 to +90	+ .02

CLAMP DIFFERENCES IN CONSTANTS

Immediately before and after reversal, at 17 reversals in the period 1914–1919, readings were taken on the collimators, marks, nadir level, and spirit level. From these readings it was found that the collimation from the collimators was the same on both clamps, and that this also agreed with the collimation from reversal on the marks. Also that the clamp difference for nadir level and spirit level were the same. The readings gave the following summary, small corrections for pivots having been applied.

Reversal Constants, Cl. W Minus Cl. E

Collimation,	$+0^{s}.006$	Nadir level,	$-0^{s}.069$
Azimuth marks,	$0^{s}.000$	Spirit level,	$-0^{s}.072$

This change of level at reversal was due to unequal weight on the wyes in the two clamps. The clamp arm makes the clamp end of the instrument the heavier, and an attempt was made to equalize the weight on the wyes by shifting the counterpoise weights at each reversal an amount determined by trial in 1913. A series of measures in 1926, however, showed a change in both spirit and nadir level of $0^{s}.040$ for this shift. Apparently the weights on the two wyes were not equalized. However, this is of no consequence as the true level is determined in either clamp.

That the nadir level is approximately the true level is shown by two investigations. During the years 1913.5 – 1918.5 the level constant was determined twice a day by nearly simultaneous readings on the nadir and with the spirit level, giving the following differences:

Spirit level minus nadir level, Cl. W., 342, $-0^{s}.015$
Spirit level minus nadir level, Cl. E., 362, $+0^{s}.015$

Another comparison was made by measures on the zenith collimator, and on the nadir, the results of 10 sets of measures are:

Zenith level minus nadir level, Cl. W., $+0^{s}.029$
Zenith level minus nadir level, Cl. E., $0^{s}.025$

The mean of the two corrections to nadir level would be $+0^{s}.006$ (Cl. W), and the corresponding corrections to the azimuth constant would be $+0^{s}.005$. The observed clamp difference in the azimuth of the marks, $-0^{s}.060$, shown in column 8, pages 15–16, indicates a correction to the azimuth constant of $+0^{s}.030$. The mean of these two corrections, $+0^{s}.017$, with level correction $+0^{s}.006$ would give a correction $+0^{s}.015$ in a transit at the equator, or a correction of $-0^{s}.015$ to a clock correction, Cl. W, and $+0^{s}.015$, Cl. E.

A careful determination of the clamp difference in clock corrections with this instrument has been made by comparing them with clock corrections determined with the 6-inch transit circle near 21 reversals during the years 1914–1923. The differences were formed for simultaneous clock corrections on a number of nights before and after each reversal of the 9-inch, the 6-inch not being reversed, and the mean clamp difference, corrected for pivot errors, is

Clock correction, Cl. W minus Cl. E, $+0^{s}.029 \pm 0^{s}.003$

and the changes in level and azimuth just indicated would reduce this to $-0^{s}.001$.

Any flexure or changes in constants, considered by this internal evidence would be equal and opposite in sign for the two clamps and would disappear from the final right ascensions, and have only a differential effect on the right ascension in either clamp. On page 39 the clamp difference in right ascension is shown to be negligible, and the differences in right ascension above and below pole shown below indicate that the reductions have placed the instrumental meridian within $0^{s}.01$ of the true pole.

ABOVE POLE MINUS BELOW POLE

The differences between the right ascensions above and below pole for each of the circumpolars are given on pages 74–76. Group means of these differences were formed, arranged according to declination, and also according to right ascension, as given in the following summary:

Above Pole minus Below Pole

Decl.	$\Delta\alpha$	$\Delta\alpha \cos \delta$	R. A.	$\Delta\alpha \cos \delta$
°	s	s	h	s
88. 6	−0. 01	0. 000	1. 5	+0. 001
86. 6	− . 02	− . 001	4. 5	+ . 001
84. 4	+ . 01	. 000	7. 5	− . 002
82. 8	. 00	+ . 002	10. 5	− . 001
82. 6	. 00	. 000	13. 5	− . 001
77. 0	− . 01	− . 003	16. 5	− . 002
72. 2	+ . 01	+ . 003	19. 5	+ . 001
67. 8	− . 01	− . 002	22. 5	+ . 005

The results show that the polar coordinates were sufficiently controlled.

THE EQUINOX CORRECTION

The equinox chosen for the definitive clock star positions, and for which all provisional right ascensions were reduced, was that of EICHELBERGER's Catalogue of Standard Stars as explained on page 22. A correction to this equinox of $+0^{s}.030$, determined from observations of the Sun, Moon, and planets, as explained on page 73, has been applied to all provisional right ascensions both for the Sun, Moon, and planets, and for the stars. This equinox correction corresponds to the condition that all stars were screened to magnitude 9.5, and that observations of the Sun, Moon, and planets were freed from personal equation. The application of corrections for personal equation to observations of the Sun, Moon, and planets, has increased their right ascensions, and therefore decreased the equinox correction by some $0^s.02$. Had no corrections for personal equation been applied the equinox of this catalogue would have been about the same as that of NEWCOMB's catalogue. For the 186 clock stars, +29° to −16°, this catalogue gives a correction of $-0^s.020$ to NEWCOMB's Fundamental Catalogue; and for all stars between +30° and −30° a correction of $-0^s.016$ to NEWCOMB and $+0^s.034$ to EICHELBERGER.

PROBABLE ERRORS

For the determination of probable errors residuals from means were used for the regions of the clock and azimuth stars, and at other declinations the differences between two observations of a star were used. The number of observations used and the probable errors for the different zones are given below.

Probable Errors of a Single Observation in Right Ascension

Decl.	No. Obs.	Prob. Error	$r \cos \delta$
Key and Chronograph Observations			
° °		s	s
−35 to −25	1, 052	±0. 030	±0. 0261
−16 to 0	2, 783	. 019	. 0191
0 to +15	2, 689	. 019	. 0190
+15 to +30	2, 186	. 018	. 0172
+50 to +60	1, 132	. 031	. 0182
+80 to +85	600	. 142	. 0183
+85 to +80 S. P.	596	. 138	. 0178
+80 to +66 S. P.	484	± . 078	± . 0243
Eye and Ear Observations			
+85 to +87	637	±0. 26	±0. 0158
+87 to +89	246	. 88	. 0156
+89 to +87 S. P.	247	. 85	. 0151
+87 to +85 S. P.	649	± . 29	± . 0174

The above errors may be expressed thus:

Chronograph, $r = \pm(0^s.017 \sec \delta + 0^s.005 \tan Z)$

or, $r^2 = \pm(0^s.018)^2 \sec^2 \delta + (0^s.012)^2 \tan^2 Z$

Eye and Ear, $r = \pm 0^s.016 \sec \delta$

The final results were examined and the computations verified for discordances larger than four times the probable error, and all observations that stood out from the mean by six times the probable error were rejected.

DECLINATIONS

Micrometer screw.—The progressive error of this screw was examined by means of the comparator microscope six times in the interval 1913–1921. The examination extended over 30 revolutions of the screw, and the progression was found negligible, the excess value of a revolution being as follows:

At 35 Rev., $\Delta R = +0''.0007$
45 Rev., $\Delta R = -\ \ .0003$
55 Rev., $\Delta R = -\ \ .0004$

The screw was seldom used more than five revolutions from the mean position, 45 revolutions, at which the nadir reading was made, and near which most of the observations were taken. Similarly, from 15 determinations in the interval 1913-1926, the periodic errors were found to be small, and no correction was applied for them. The mean result was as follows:

$$\Delta = +0''.002 \sin\theta - 0''.004 \cos\theta + 0''.000 \sin 2\theta - 0''.003 \cos 2\theta$$

The value of one revolution of the zenith distance micrometer screw used in the reductions was 22″.8507. This value was deduced from 15 sets of measures in which the runs of the screw over its nadir image were compared with corresponding arcs on circle B. In the interval 1913–1922, 23 such determinations were made, giving 22″.8500 ± 0″.0008. Arranged by temperatures the values were 22″.846 at 83° and 22″.854 at 33°. The range 0″.004 from average temperature was considered negligible.

Micrometer threads.—The inclination of the close double threads B, on the plate carried by the zenith distance micrometer screw, was determined frequently by examination of the bisections in the regular observations of stars, a part of which were north and a part south of the zenith. The inclination changed generally with removal of micrometer for insertion of new threads, and its amount at an outer vertical thread, 23^s from the meridian, was as follows:

1913.6 – 15.9, 0″.00
1915.9 – 18.5, 0″.09
1918.5 – 19.9, 0″.07
1919.9 – 26.5, 0″.17

The interval between these standard threads B and the wider doubles A used for Jupiter, and C used for Mars and Saturn, were determined when such planets were observed. These intervals were about +97″ and −91″, respectively.

Microscopes.—The graduated circle B was read with four microscopes 90° apart. As previously stated, the transit circle was so set that the readings on the micrometer heads of the microscopes were practically the same for all objects and for the nadir, the variations being generally a small part of a revolution. As the errors of runs were frequently determined and adjusted small, there were no appreciable corrections for runs. The periodic and progressive errors of the microscope micrometer screws were examined and found to be very small, and for the small part of the screws in use there were no corrections for such errors.

Division errors.—The division errors of circle B were determined in 1906–1907 as fully explained in Volume IX, Part I, and all circle readings in the present work have been corrected for division errors in conformity with those results. The divisions $25° 2' + \frac{n\pi}{2}$ were used on the nadir from 1913.5 to 1918.5 and the divisions $14° 20' + \frac{n\pi}{2}$ from 1918.5 to 1926.5. The corrections for these two readings were made zero and the two corresponding tables of corrections for division errors with proper arguments in zenith distance, were derived from Table XII of Vol. IX.

Nadirs.—The zenith distances were reduced using zero points from nadir observations. Such observations were taken every three hours or less, and if two resulting zenith point corrections differed more than 0″.5, interpolation was used for included objects, otherwise a mean was used. List stars were regularly reduced with two nadirs, rarely with one, occasionally with three. Other objects were frequently reduced with one nadir, and this was the rule for day work.

Refraction.—The Pulkowa Refraction Tables, as printed in Volume IV, Appendix II, were used in computing the refractions. The temperature of the air was taken from readings of the aspirated thermometer above the instrument. Comparisons of the readings of this thermometer with those of the aspirated thermometer in the outer shelter, both of which were always read, showed no differences during the night hours, but as stated on page 64 the outer thermometer averaged 0°.7 lower in the daytime. The thermometers were tested by the United States Bureau of Standards and have no appreciable errors. The barometer was compared with standards at the United States Weather Bureau and at the United States Bureau of Standards several times. Anomalous readings of the thermometer or barometer were checked by comparison with concurrent records of a thermograph and a barograph. For examination of any possible annual or temperature term in the barometer, its readings at annual temperatures were compared with readings on over a thousand nights at 8 p. m. of a standard barometer kept at uniform temperature in the Weather Bureau some mile or more southeast of the Observatory. Both sets of readings were reduced to sea level and standard temperature. No seasonal variation was found, although there was a constant unexplained difference of 0.01 inch in the two barometers. The corrections to the provisional refractions are discussed on page 50.

Variation of latitude.—The observed zenith distances were transformed by means of a provisional latitude of the transit circle, +38° 55′ 14″.41 with corrections for variation of latitude, derived from the results of the International Latitude stations before 1915.8, and after that date from observations with the photographic zenith tube at this Observatory, an offset of 0″.14 between the two systems being applied. The variation for the 12 years as shown in the accompanying table sums up zero.

Corrections to the Declinations for Variation of Latitude

	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
	″	″	″	″	″	″	″	″	″	″	″	″	″
Jan. 1		+. 06	−. 08	−. 15	−. 19	−. 07	+. 06	+. 07	−. 06	−. 10	−. 17	−. 16	−. 08
16		. 08	−. 02	. 12	. 20	. 09	. 05	. 09	. 04	. 09	. 17	. 18	. 09
Feb. 1		. 11	+. 06	. 10	. 19	. 10	. 04	. 11	−. 01	−. 05	. 16	. 18	. 10
16		. 14	. 13	. 07	. 18	. 12	+. 02	. 12	+. 05	. 00	. 14	. 15	. 11
Mar. 1		. 16	. 19	−. 03	. 17	. 13	. 00	. 13	. 09	+. 05	. 11	. 13	. 11
16		. 17	. 25	+. 02	. 14	. 14	−. 01	. 14	. 12	. 10	. 07	. 10	. 09
Apr. 1		. 15	. 29	. 07	. 10	. 12	. 01	. 13	. 13	. 13	−. 02	. 06	. 07
16		. 12	. 31	. 12	. 05	. 09	. 01	. 12	. 15	. 15	+. 02	. 03	. 05
May 1		. 08	. 31	. 15	−. 01	. 07	. 01	. 10	. 15	. 16	. 05	. 02	. 04
16		+. 04	. 29	. 18	+. 02	. 06	. 03	. 07	. 14	. 17	. 09	. 01	. 03
June 1		. 00	. 26	. 21	. 04	. 04	. 06	. 05	. 11	. 16	. 11	. 01	. 03
16		−. 03	. 23	. 23	. 07	−. 02	. 10	. 03	. 08	. 14	. 11	. 01	−. 03
July 1		. 05	. 20	. 24	. 10	. 00	. 11	+. 01	. 05	. 11	. 12	−. 01	
16		. 07	. 18	. 23	. 13	+. 01	. 11	−. 02	+. 03	. 09	. 12	. 00	
Aug. 1	−. 18	. 10	. 14	. 21	. 15	. 03	. 11	. 06	. 00	. 06	. 12	. 00	
16	. 17	. 12	. 11	. 18	. 14	. 05	. 10	. 08	−. 03	+. 03	. 12	+. 01	
Sept. 1	. 16	. 15	+. 06	. 13	. 12	. 07	. 08	. 10	. 07	. 00	. 13	. 04	
16	. 14	. 18	−. 01	. 07	. 10	. 09	. 08	. 12	. 10	−. 03	. 11	. 04	
Oct. 1	. 13	. 20	. 08	+. 02	. 07	. 10	. 06	. 12	. 15	. 06	. 08	. 04	
16	. 10	. 21	. 16	−. 04	. 04	. 12	. 04	. 13	. 17	. 10	+. 03	+. 02	
Nov. 1	. 08	. 20	. 24	. 09	. 03	. 12	−. 02	. 14	. 17	. 11	−. 02	−. 02	
16	. 05	. 18	. 23	. 13	+. 01	. 12	. 00	. 14	. 15	. 12	. 06	. 05	
Dec. 1	−. 01	. 15	. 21	. 16	−. 02	. 10	+. 02	. 12	. 13	. 14	. 10	. 07	
16	+. 02	−. 12	−. 18	−. 18	−. 05	+. 08	+. 05	−. 09	−. 11	−. 16	−. 13	−. 07	

FLEXURE

The flexure of the instrument was determined by use of the horizontal and vertical collimators. Measures were made every few months and altogether there were 103 determinations of the horizontal flexure and 48 determinations of the vertical flexure as shown in the table. The average residual for a determination is ±0″.17, and the probable error of the final flexure corrections ±0″.03.

Measures of Flexure

Horizontal Collimators, 1913.5—18.5											
1900+	Cl.	Flexure	1900+	Cl.	Flexure	1900+	Cl.	Flexure	1900+	Cl.	Flexure
		″			″			″			″
13. 6	W	−0. 42	14. 8	E	−0. 38	15. 8	W	−0. 42	16. 9	E	−0. 11
. 6		− . 14	. 8	E	+ . 06	. 8	W	− . 17	. 9		− . 72
. 7		− . 43	. 8	W	− . 32	16. 0	E	− . 23	. 9	E	− . 59
. 7	W	− . 22	. 8		− . 14	. 0		+ . 03	17. 1	W	− . 29
. 9	E	− . 44	. 8		− . 50	. 0	E	− . 37	. 1		− . 36
. 9		− . 41	15. 0		− . 28	. 1	W	− . 77	. 1		− . 20
. 9		− . 37	. 0		− . 26	. 1		− . 73	. 1		+ . 05
14. 0		− . 40	. 1	W	− . 36	. 1		− . 17	. 2		− . 86
. 0		− . 04	. 3	E	− . 37	. 3		− . 14	. 2	W	− . 60
. 0		− . 40	. 3	W	− . 24	. 3		− . 09	. 3	E	− . 39
. 4		− . 62	. 4		− . 44	. 3	W	− . 26	. 3	E	− . 54
. 4		− . 58	. 4		− . 50	. 4	E	− . 82	18. 4	W	− . 43
. 4		− . 15	. 4		− . 34	. 4		− . 60	. 4		− . 23
. 6		− . 45	. 6		− . 69	. 4	E	− . 59	18. 4	W	− . 35
. 6		− . 79	. 6		− . 48	. 7	W	− . 37			
. 6		− . 39	. 6		− . 62	. 7	W	− . 37			
14. 7	E	− . 33	15. 8	W	− . 18	16. 9	E	− . 26	Mean		− . 380

Measures of Flexure—Continued

1900+	Cl.	Flexure	1900+	Cl.	Flexure	1900+	Cl.	Flexure	1900+	Cl.	Flexure
Horizontal Collimators, 1918.5—25.5											
		″			″			″			″
19. 0	W	+0. 52	19. 8	E	+0. 17	21. 3	W	+0. 64	23. 4	E	+0. 29
. 0		+ . 27	20. 0	W	− . 04	. 3		+ . 42	. 4		+ . 10
. 0	W	+ . 54	. 0		+ . 28	. 7		+ . 08	. 4		− . 03
. 2	E	− . 08	. 0	W	+ . 22	. 7		+ . 18	. 4		+ . 25
. 2		+ . 10	. 4	E	+ . 32	22. 1		+ . 26	. 4		+ . 21
. 2	E	+ . 17	. 4		+ . 45	. 1	W	+ . 01	. 4		+ . 60
. 3	W	+ . 22	. 4	E	+ . 54	. 8	E	+ . 17	24. 4		+ . 19
. 3		+ . 33	. 8	W	+ . 73	. 8		− . 09	24. 4	E	+ . 24
. 3	W	+ . 36	. 8		+ . 52	. 9		+ . 44			
19. 8	E	+ . 13	21. 3	W	+ . 29	22. 9	E	+ . 34	Mean		+. 275
Vertical Collimator, 1913.5—18.5											
14. 7	E	−1. 08	15. 6	W	−0. 72	17. 0	W	−0. 69	17. 3	W	−0. 80
. 7		− . 81	. 6	W	− . 57	. 0		− . 88	. 3	W	−1. 11
. 7	E	− . 96	16. 0	E	− . 48	. 0		−1. 00	. 3	E	− . 93
15. 1	W	− . 53	. 0		− . 03	. 3		− . 78	. 3		−1. 04
. 1		− . 75	16. 0	E	− . 55	. 3		− . 91	17. 3	E	− . 94
. 1		− . 85	17. 0	W	− . 77	17. 3	W	− . 68			
15. 6	W	− . 86							Mean		−. 780
Vertical Collimator, 1918.5—25.5											
19. 0	E	+1. 22	20. 4	E	+0. 86	21. 8	E	+1. 51	23. 3	E	+1. 31
. 0		+1. 24	. 4	E	+ . 77	22. 2	W	+1. 22	. 3		+1. 16
. 0	E	+1. 16	21. 4	W	+1. 13	. 2		+1. 08	23. 3	E	+1. 36
. 6	W	+1. 26	. 4		+1. 02	22. 2		+1. 10			
. 6		+1. 33	. 4	W	+1. 23	23. 0		+1. 28			
19. 6	W	+1. 14	. 8	E	+1. 57	. 0		+1. 41			
20. 4	E	+1. 54	21. 8	E	+1. 40	23. 0	W	+1. 14	Mean		+1. 227

The measures grouped by clamps and also by temperatures are as follows:

	Horizontal Flexure				Vertical Flexure			
	1913.5—18.5		1918.5—25.5		1913.5—18.5		1918.5—25.5	
	″		″		″		″	
Cl. W.	−0. 36	37	+0. 23	20	−0. 79	15	+1. 20	12
Cl. E.	− . 40	28	+ . 32	18	− . 76	9	+1. 26	12
Summer	− . 43	34	+ . 27	20	− . 85	12	+1. 16	12
Winter	− . 33	31	+ . 27	18	− . 71	12	+1. 29	12
Mean	−. 380		+. 275		−. 780		+1. 227	

Most of the flexure is in the circle, and as this was shifted 169° 18′ in 1918.5 a solution of the above means gave the horizontal and vertical tube flexures 0″.04 and

0″.19, and the flexure of the circle 1″.06 when the division 136°.6 is horizontal. The corresponding quantities determined in 1903–1911 are 0″.29 and 0″.04, and 1″.16 at 137°.9. The tube flexure is very small. It was changed in 1912 by the addition of the variable screen and its counterpoises. In 1865 NEWCOMB found the flexure of this circle to be 1″.20; apparently it has been quite constant for 60 years.

Corrections for flexure, including that for the nadir, were applied to all preliminary zenith distances according to the following expressions:

$$1913.5-18.5,\quad \Delta Z=+0''.380\sin Z+0''.780\,(1+\cos Z)$$
$$1918.5-26.5,\quad \Delta Z=-0''.275\sin Z-1''.227\,(1+\cos Z)$$

as tabulated in the following table. It is shown, however, on page 53 that with the refraction finally adopted, the observations can be somewhat better satisfied with a sin Z term whose coefficient is 0″.2 different from that given by the collimators.

Corrections to the Declinations for Flexure

Z. D.	For Tube	For Circle 1913.5–18.5	For Circle 1918.5–26.5
°	″	″	″
280	+0.01	−0.25	+0.05
290	− .02	− .07	− .14
300	− .06	+ .12	− .31
310	− .09	+ .30	− .49
320	− .11	+ .46	− .65
330	− .15	+ .64	− .77
340	− .17	+ .77	− .89
350	− .18	+ .88	− .98
0	− .19	+ .97	−1.03
10	− .20	+1.03	−1.05
20	− .19	+1.05	−1.05
30	− .19	+1.06	−1.01
40	− .17	+1.01	− .94
50	− .15	+ .94	− .85
60	− .12	+ .84	− .73
70	− .10	+ .72	− .58
80	− .07	+ .58	− .41
180	+ .19	− .97	+1.03
Corr. to Z. Pt. Corr.		+ .78	−1.23

REFLECTED OBSERVATIONS

On 74 nights during the years 1914–1917, numerous lists of stars were observed direct and by reflection, furnishing altogether 1,131 differences in zenith distance, R–D, extending from 16° to 69° both north and south of the zenith. A list was always taken on two nights; that half of the list observed by reflection the first night was observed direct the second night, and vice versa; no star was observed direct and reflected at the same transit. The microscopes were read by an assistant and read immediately after the bisections in all cases. On 31 nights there were observations both north and south of the zenith. Nadirs were taken a number of times a night and the observations south of the zenith, in which for reflected observations the observer stood on the nadir ladder to the north of the instrument, were reduced with nadirs taken with the nadir ladder also north of the instrument; and similarly observations north of the zenith were reduced with nadirs taken ladder south. It was thought that any effects instrumental, or personal, would be similar on reflected observations and on the nadir taken in nearly the same position; and apparently this was so, as the R–D is very small and nearly the same both sides of the zenith, although the nadirs in the two positions of the ladder differ as much as 0″.6 on the same night, each being out a part of this amount as judged by agreement of these observations with the regular work, in which the ladder was always south and there was no assistant.

These observations were reduced, using the sine and cosine flexures as given by the horizontal and vertical collimators. The table gives the results arranged in group means according to declination, with the number of differences in each group. The probable error of a difference is ±0″.48. The smallness of the residuals and lack of variation with zenith distance have important bearing on the use of the collimator measures for flexures and the sine law. The residuals may be expressed thus:

$$1/2(R-D) = -0''.04 - 0''.05 \sin Z$$

The residuals indicate a small correction of 0″.04 to the cosine flexure in the direction required by the clamp difference. Apparently there is very little discordance between direct and reflected observations observed and reduced in this manner.

Differences in Declination, 1/2 (R–D)

Decl.	Cl. W.	No.	Decl.	Cl. E.	No.
°	″		°	″	
+79 S. P.	+0. 08	41	+82 S. P.	−0. 13	40
+86 S. P.	− . 12	44	+87 S. P.	− . 10	38
+86	− . 07	29	+87	− . 08	30
+83	− . 09	28	+82	− . 07	39
+80	− . 13	29	+78	− . 07	29
+75	− . 02	28	+71	− . 11	37
+66	+ . 02	30	+66	− . 17	27
+60	+ . 01	29	+59	− . 11	30
Zenith			Zenith		
+20	+ . 03	34	+21	− . 04	40
+15	+ . 07	36	+14	− . 02	43
+ 9	+ . 13	35	+ 7	− . 21	40
0	+ . 04	36	− 4	− . 09	42
−10	+ . 05	34	−10	− . 01	40
−14	+ . 02	35	−14	+ . 01	35
−17	+ . 17	35	−18	− . 09	41
−20	+ . 10	34	−21	− . 18	43
Mean	+ . 02	537	Mean	− . 09	594

PERSONAL EQUATION IN DECLINATION

Prism equation.—All observations of stars in zenith distance not having an equal number of bisections in each of the two positions of the reversing prism, were corrected for bisection equation. There were comparatively few of these, and the average correction for one bisection was 0″.2.

Zenith observations.—For examination of discontinuity at the zenith due to the observer changing his position from head north to head south, over 700 observations of zenith stars were taken as explained on page 35. As usual the prism was reversed in the middle of each observation for elimination of bisection equation irrespective of the position of the observer. The zenith distance micrometer screw head had the same position as regards the observer head north on one clamp as head south on the other. The results are:

Zenith Observations, North minus South

Obsr.	Cl. W	Cl. E	Obsr.	Cl. W	Cl. E
	″	″		″	″
M	−0. 11	−0. 14	Bn	−0. 16	−0. 27
P	− . 03	+ . 19	Ry	+ . 15	− . 11

Relative equations.—Large numbers of observations in declinations of the clock and azimuth stars were differenced by observers giving the following:

Differences in Declination by Observers

Obsr.	Cl. W		Cl. E	
	North	South	North	South
	1913–18			
	″	″	″	″
M−P	−0. 20	−0. 02	−0. 02	+0. 07
M−S	+ . 20	+ . 02	. 00	− . 01
M−Sr	− . 24	+ . 09	+ . 03	+ . 06
P−S	+ . 40	. 00	+ . 02	− . 08
P−Sr	− . 04	+ . 07	+ . 05	− . 01
S−Sr	− . 44	+ . 07	+ . 03	+ . 07
	1918–26			
	″	″	″	″
M−P	−0. 11	+0. 12	+0. 03	+0. 21
M−Bn	− . 07	− . 06	+ . 05	− . 05
M−Ry	+ . 02	− . 02	+ . 01	+ . 06
P−Bn	+ . 04	− . 16	+ . 02	− . 23
P−Ry	+ . 13	− . 17	− . 02	− . 14
Bn−Ry	+ . 09	+ . 02	− . 04	+ . 04

These differences were again differenced, north minus south, and then combined in solution with the zenith results, giving the following:

Personal Equations in Declination, North minus South

Obsr.	Cl. W	Cl. E	Obsr.	Cl. W	Cl. E
	″	″		″	″
M	−0. 10	−0. 10	Ry	−0. 12	−0. 10
P	+ . 12	+ . 04	S	− . 29	− . 09
Bn	− . 09	− . 21	Sr	+ . 23	− . 05

The corrections are small and uncertain. The mean change at the zenith for both clamps is 0″.06. The comparisons with other catalogues, $\Delta\delta_\delta$ page 96, were plotted and smooth curves were drawn through them. These curves have maxima near the zenith, but they show little or no discontinuity there.

The only corrections for personal equation applied to the declinations in this work are the following relative equations for the Sun, which were so determined that the mean declination of the Sun was unchanged in each epoch.

Corrections to Sun's Declination for Relative Personal Equation

1918.6—20.0			1920.0—22.47			1922.47—25.2		
Obsr.	Cl. W	Cl. E	Obsr.	Cl. W	Cl. E	Obsr.	Cl. W	Cl. E
	″	″		″	″		″	″
M	−0.10	−0.27	P	−0.10	+0.40	P	−0.24	+0.44
P	+.10	−.07	Bn	.00	+.13	Bn	−.06	+.20
Sr	.00	+.33	Ry	+.10	−.50	Ry	+.30	−.63

CLAMP DIFFERENCE

With the declinations corrected for flexure as already explained, clamp differences were formed for the two positions of the circle as tabulated below.

Clamp Difference in Declination, 1/2 (W—E)

1913.5—18.5						1918.5—25.5					
Z D N	No.	Δδ	Z D S	No.	Δδ	Z D N	No.	Δδ	Z D S	No.	Δδ
°		″	°		″	°		″	°		″
5	430	−0.16	5	416	−0.16	3	560	−0.10	2	658	−0.09
18	430	−.20	15	1028	−.17	8	312	−.03	7	406	−.05
27	572	−.23	25	904	−.24	13	330	−.04	12	748	−.09
35	370	−.22	29	600	−.25	18	272	−.09	17	1450	−.11
47	328	−.12	33	1132	−.27	23	240	−.14	22	1254	−.12
55	312	−.16	37	650	−.17	28	186	−.01	27	1396	−.09
67	346	−.03	42	960	−.13	33	134	−.02	32	1910	−.05
			47	700	−.08	40	148	−.10	37	944	−.05
			51	896	−.05	46	781	−.08	42	1052	−.09
			59	456	−.07	56	816	+.04	47	1386	−.05
			69	468	−.02	68	86	+.10	52	922	.00
									59	554	+.03
									63	488	.00
									69	380	−.03

The above clamp differences may be expressed as follows:

$$1913.5-18.5\ \tfrac{1}{2}\,(W-E),\quad -0''.12-0''.02\cos Z-0''.11\sin 4Z$$

$$1918.5-25.5\ \tfrac{1}{2}\,(W-E),\quad +0''.01-0''.07\cos Z-0''.04\sin 4Z$$

As the differences are only one-half as large in the second position of the circle, they may be partly attributed to division errors. The reflection observations were taken on the first position of the circle and they agree with the above results in giving a correction of about +0″.06 to the cosine flexure used.

Instrumentally the difference Cl. W–Cl. E should be the same both sides the zenith, and the observations show this. Combining north and south, group means were formed and plotted and smooth curves drawn through them. From these curves the corrections for clamp differences were derived which, as given in the table below, were applied to all declinations.

Corrections to the Declinations for Clamp Differences

Decl.	1913.5—18.5	1918.5—26.5	Decl.	1913.5—18.5	1918.5—26.5
°	″	″	°	″	″
−30	+0.03	0.00	+50	+0.17	+0.10
−20	+ .05	.00	+60	+ .22	+ .09
−10	+ .09	+ .02	+70	+ .24	+ .07
0	+ .17	+ .05	+80	+ .16	+ .04
+10	+ .24	+ .08	+90	+ .08	.00
+20	+ .20	+ .10	+90 S. P.	− .08	.00
+30	+ .17	+ .08	+80 S. P.	− .05	.00
+40	+ .16	+ .09	+70 S. P.	− .02	.00

The signs are for clamp west.

CORRECTIONS TO THE LATITUDE AND REFRACTION

Observations show that NEWCOMB's equatorial declinations have held good for 60 years. This system was based on the principle that the average declinations of the Sun, Moon, and planets shall be at the equator. As sufficient observations were available, this principle has been used in establishing the declination system of the present catalogue.

The observations of the Sun, Moon, and planets reduced using the Pulkowa refraction, the flexure from the collimators, and the polar point from circumpolars gave the following provisional corrections to the Ephemeris:

Sun	+0″.35	Mercury	−0″.19	Mars	−0″.01
Moon	+ .01	Venus	− .22	Jupiter	− .05
				Mean	+ .08

The observations reduced in this way approximately satisfy the circumpolar observations, and also the condition that the observed declinations of the Sun, Moon, and planets shall average zero or that it is 90° from the pole to the equator instrumentally. However, on account of the variations with zenith distance of the declination differences as shown in the following tables the corrections for polar point, refraction, and flexure have been rather exhaustively investigated, as shown in what follows, and a definitive solution for the equator point from the resulting final declinations is given on page 73.

Circumpolar stars.—The standard stars north of 66° declination were observed four times each above and below pole, and those culminating below pole from 70° to 75° zenith distance, with 20 others from 75° to 82° zenith distance, were observed eight times each below pole. With the observations of the 17 azimuth stars this made some 4,300 observations used in the discussions. In forming the differences for each star in observed declinations, below minus above pole, the observations at larger zenith distance were given less weight as indicated by their probable errors, and the differences were grouped to form equations of approximately equal weight, each azimuth star, however, having an equation of its own. The 37 equations are given in the table on page 55 where the weights represent roughly numbers of observations. The declination differences in this table and also in those following are based on the latitude +38° 55′ 13″.91 given by the mean of the above and below pole observations. The residuals v_1 result from the solution of the equations in the form:

$$\delta'-\delta=2\Delta\varphi+(\tan Z+\tan Z')\Delta R$$

which gave

$$\Delta\varphi=+0''.09\pm0''.03,\qquad \Delta R=-0''.065\pm0''.025$$

given as solution number (1) in the table on page 55. For further examination the observations were subdivided into two epochs 1913–1918, 1918–1925, corresponding to the two positions of the circle and to the two epochs of adopted flexures. There were no observations below 75° zenith distance in the second group. The solutions gave:

$$\begin{array}{lll} 1913\text{–}1918, & \Delta\varphi=0''.00 & \Delta R=-0''.031 \\ 1918\text{–}1925, & \Delta\varphi=+0.16 & \Delta R=-0.098 \end{array}$$

These solutions would give a difference of 0″.2 for south stars. The observations do not show such a difference. As all stars were regularly observed twice in each epoch, a combined solution such as (1) was considered a better correction for the mean positions. Another solution was made for the first epoch, taking $0.01R$ as the coefficient of $\triangle R$ instead of the tangent of the zenith distance and using the mean of the actual refractions computed for the individual observations. This gave a result identical with that above, namely

$$1913\text{–}1918,\ \Delta\varphi=0''.00\quad \Delta R=-0''.054$$

These observations were also solved for terms in sin Z and sin $4Z$, as explained later.

Comparison with other catalogues.—For further investigation of the refraction the observations south of the zenith were compared with observations of the same stars taken at the Cape and the San Luis Observatories; and observations throughout the meridian were compared with the Boss fundamental system as recently revised by H. Raymond and B. Boss. There were about 1,340 stars common to this catalogue and to the Second Cape Fundamental Catalogue, 1900, and about 770 stars common to the San Luis Catalogue, 1910. The positions from the Cape and San Luis catalogues were brought up to 1920, using quite largely the proper motions given in Cape or in Boss. In forming the differences, the means of which for groups 2° wide are given in the tables, pages 56–59, the observations at each observatory were given decreasingly less weight from unity at zenith distance 45° to a weight of 0.2 at zenith distance 75°. On page xxxvi in the First Cape Catalogue, 1925, the correction

$$-0''.12+0''.60\cos\delta-0''.08\tan Z$$

to Cape II, 1900, is adopted as the correction which gives the best general agreement between star observations and Sun and planet observations at Greenwich, Washington, and Cape. In the second set of differences (C) − W, page 56, column 6, the Cape positions were corrected by the above correction, and the solutions using these accepted as giving more definitive corrections for Washington. In the San Luis Catalogue, page lvi, corrections are given to reduce that catalogue to the more independent system of the Albany-San Luis catalogues combined, and in the second set of differences (SL)–W in the table on page 57, column 6, the San Luis positions were corrected accordingly. The systematic differences between the Cape and San Luis catalogues and Boss are given in those catalogues, and by means of them and the comparisons of the Washington observations with those catalogues a comparison of the Washington positions with Boss was obtained. For stars north of the zenith a direct comparison was made. In this way were formed the differences B-W given in the table on pages 58–59. In *Astr. Jour.* No. 884 are given the systematic corrections to Boss derived from RAYMOND's discussion, which includes modern catalogues not used by Boss, and from B. Boss' discussions of the Albany-San Luis fundamental system. The comparison of Washington with this definitive system (B)–W is given in column 4 of the same table.

Solutions for refraction.—The four series of residuals in these tables were solved in various ways, introducing different terms. The more important results are collected in the tables on pages 54–55.

A term in sin $4Z$ has been found to give the deviation from a tan Z expression in the differences between night and day observations. See page 63. The differences reach a maximum at 22°.5 and a minimum at 67°.5 zenith distances. This same rapid change of night minus day differences in the end shutters as compared with the slow change in the top shutter had previously been found in the work on the 6-inch transit circle (see Volume XI, p. 93) and the suggestion made that the refraction in the daytime is different in the two shutters. As the shutters meet at 45° Z. D., the term sin $4Z$ has opposite signs in the two shutters, and analytically supplements a tan Z term in explaining the differences. If a pronounced shutter term exists in the daytime a small one might exist at night. Whether or not this term is due to the form of building, the declination differences under discussion show decided evidences of such a term in the observations especially south of the zenith, as the solutions indicate. And as the circumpolars afford material for determining the coefficient it has been included in the solution.

Another natural term to look for is a correction to flexure of the form sin Z. Other terms possibly having less physical explanation such as cos Z and cos δ were tried. The circumpolars were solved, admitting a different refraction in each shutter, but the solution gave about the same for both shutters. On account of the lack of independence of different terms in functions of the zenith distance in the same solution, an attempt was made to determine the refraction first. The various solutions of the declination differences which include a term in tan Z are collected in the table on page 54. It will be seen that a marked larger negative correction to the refraction coefficient obtains from observations south of the zenith than from those north of the zenith. For comparison similar results are given from the previous work on this instrument, 1903–1913, and from the work on the 6-inch transit circle, 1911–1918. In all three catalogues the refraction is less to the south than to the north. The two transit houses are alike and similarly situated. The Observatory is on the rolling slope of the Potomac Valley. From the river a mile to the south the land rises some 300 feet to the Observatory and thence some 200 feet more to higher ground some half mile to the north. A correlated circumstance is found at Greenwich, where the refraction is less to the north where the land slopes down to and follows the river a mile away.

The mean correction to the refraction is about the same for the three catalogues, and, moreover, this mean is almost exactly the reduction required by the Pulkowa refraction to reduce it to the latitude of Washington for gravity. This correction, $-0''.104$, was not included in the refraction table, Volume IV, Appendix II, used in the reductions. This theoretical correction is a little larger than that given by the circumpolars but considerably less than that indicated by the south stars. As the circumpolars are equally well satisfied with it, it has been adopted.

Solutions for other terms.—Having adopted $\Delta R = -0''.10 \tan Z$, the declination differences for the different comparisons were all corrected for this term and the various solutions given in the table on page 55 were then made for other terms. In solution (21) there were combined with the equations from the circumpolar stars used in solution (20) three equations formed from the mean corrections to the Ephemeris from observations of the Sun, Moon, and planets as follows:

Decl. +19°	Corr. −0″.10
0	−0″.04
−19	+0″.10

From an examination of the table it is seen that the solutions (22–28) from comparisons with the other catalogues and the solution (21) combining the circumpolars and the corrections to the Ephemeris of the Sun, Moon, and planets all upheld the solution (20) given by the circumpolars themselves. This solution,

$$\Delta\delta = +0''.11 \sin 4Z + 0''.21 \sin Z$$

was adopted as that best representing the observations, and, moreover, because it was given by these observations independently of the comparison catalogues.

The results from the reflected observations of stars given on page 47 do not indicate a correction to the flexure from the collimators as large as that found here. A new solution of the circumpolar observations 1903–1913 indicates a correction almost the same as found here. See page 98 below. It is quite possible that there are small systematic errors in the collimator measures. The terms $-0''.10 \tan Z$ and $+0''.21 \sin Z$ tend to destroy each other so that the declination residuals are not much altered by their inclusion or exclusion.

The finally adopted correction to the provisional declinations is

$$\Delta\delta = -0''.10 \tan Z + 0''.11 \sin 4Z + 0''.21 \sin Z$$

This correction as tabulated below was applied to all declinations both for the stars and for the Sun, Moon, and planets.

Final Corrections to the Declinations

Decl.	Δδ	Decl.	Δδ	Decl.	Δδ
°	″	°	″	°	″
−35	+0.26	+15	−0.15	+65	+0.15
−30	+ .18	+20	− .14	+70	+ .14
−25	+ .13	+25	− .11	+75	+ .11
−20	+ .08	+30	− .08	+80	+ .08
−15	+ .04	+35	− .03	+85	+ .04
−10	− .01	+40	+ .01	+90	.00
−5	− .05	+45	+ .06	+85 S. P.	+ .05
0	− .09	+50	+ .10	+80 S. P.	+ .09
+5	− .13	+55	+ .13	+75 S. P.	+ .14
+10	− .15	+60	+ .15	+70 S. P.	+ .19

The corresponding latitude of the transit circle given by the circumpolars is

Latitude, +38° 55′ 13″.91

This latitude together with that found on page 98 below, +38° 55′ 14″.07, found from the rediscussion of the 1903–1913 work, gives the latitude of the Observatory, (center of clock house), as +38° 55′ 13″.92. This latitude is probably too small by 0″.2.

The differences in nadirs taken ladder north and ladder south in connection with the reflection work indicate a small systematic error in the nadir readings. This is also indicated by the comparison of observed zenith distances of 78 zenith stars from concurrent observations with this instrument and on the photographic zenith tube, observations with the latter instrument not being affected by division errors, flexure, and personal equation peculiar to nadir observations on a transit circle. The final declinations being referred to the pole are unaffected by such an error.

The residuals for the various solutions are given in the tables. They are marked with the same number as the corresponding solution. The last set of residuals in each table, *v′*, represents the differences between the final declinations of this catalogue and the corrected declinations of the comparison catalogues.

Solutions for Determinations of the Correction to the Refraction

		″	″	″
1.	Circumpolars	$-0.065 \tan Z$		
2.	"	$-0.07 \tan Z$	$+0.04 \sin 4Z$	$+0.16 \sin Z$
3.	" +S. M. Pls	$0.00 \tan Z$	$+0.11 \sin 4Z$	
4.	Boss, North	$+0.04 \tan Z$	$+0.18 \sin 4Z$	$+0.31 \sin Z$
5.	" South	$-0.13 \tan Z$	$+0.19 \sin 4Z$	$-0.02 \sin Z$
6.	" N+S	$-0.03 \tan Z$	$+0.21 \sin 4Z$	$+0.16 \sin Z$
7.	(Boss), N+S	$-0.03 \tan Z$	$+0.18 \sin 4Z$	$-0.30 \cos \delta$
8.	Cape	$-0.40 \tan Z$		$+0.25 \tan Z_C$
9.	"	$-0.22 \tan Z$	$+0.18 \sin 4Z$	$+0.21 \tan Z_C$
10.	(Cape)	$-0.27 \tan Z$		
11.	"	$-0.12 \tan Z$	$+0.16 \sin 4Z$	
12.	San Luis	$-0.25 \tan Z$	$+0.08 \sin 4Z$	$+0.06 \tan Z_{SL}$
13.	(San Luis)	$-0.28 \tan Z$		
14.	"	$-0.26 \tan Z$	$+0.04 \sin 4Z$	$+0.05 \tan Z_{SL}$
15.	Cordoba	$-0.25 \tan Z$		
16.	"	$-0.15 \tan Z$	$+0.14 \sin 4Z$	
17.	Cape 25	$-0.27 \tan Z$		
18.	"	$-0.18 \tan Z$	$+0.12 \sin 4Z$	
	Adopted	$-0.10 \tan Z$		

Compare:

9-inch, 1903–1913 (Vol. IX, p. A cxxxviii).
Circumpolars, $-0''.13 \tan Z$.
With Cape, $-0''.21 \tan Z$.

6-inch, 1911–1918 (Vol. XI, p. 90).
Circumpolars, $-0''.06 \tan Z$.
With Cape, $-0''.21 \tan Z$.

Solutions after the Refraction Correction, −0″.10 tan Z was Applied

	″	″	″
19. Circumpolars	+0. 08 sin 4Z		
20. "	+0. 11 sin 4Z	+0. 21 sin Z	
21. " + S. M. Pls	+0. 10 sin 4Z	+0. 19 sin Z	
22. (Boss)	+0. 10 sin 4Z		
23. "		+0. 24 sin Z	
24. "	+0. 14 sin 4Z	+0. 08 sin Z	−0. 36 cos δ
25. Cape	+0. 24 sin 4Z	+0. 17 tan Z_C	
26. (Cape)	+0. 19 sin 4Z	+0. 04 sin Z	
27. San Luis	+0. 17 sin 4Z	0. 00 tan Z_{SL}	
28. (San Luis)	+0. 10 sin 4Z	−0. 20 sin Z	
29. Cordoba	+0. 19 sin 4Z		
30. Cape 25	+0. 20 sin 4Z		
Adopted (20)	+0. 11 sin 4Z	+0. 21 sin Z	

Corresponding latitude, +38° 55′ 13″.91.

Refraction, Comparison of Declinations Above and Below Pole

Z	Z′	tan Z +tan Z′	δ′−δ	v_1	Wt.	v′	
°	°		″	″		″	″
20. 7	81. 4	6. 95	−0. 45	−0. 18	40	−0. 09	
24. 2	77. 9	5. 11	+ . 08	+ . 23	40	+ . 27	
28. 0	74. 1	4. 04	+ . 04	+ . 12	80	+ . 14	
28. 8	73. 3	3. 89	+ . 08	+ . 15	80	+ . 17	
29. 6	72. 5	3. 74	− . 02	+ . 05	80	+ . 06	
30. 5	71. 6	3. 60	− . 01	+ . 05	80	+ . 06	
31. 4	70. 7	3. 47	− . 24	− . 19	80	− . 18	+0. 06
32. 7	69. 4	3. 30	− . 21	− . 17	80	− . 16	
33. 7	68. 4	3. 20	− . 07	− . 04	80	− . 03	
34. 7	67. 4	3. 11	+ . 02	+ . 04	80	+ . 06	
35. 8	66. 3	3. 00	0	+ . 02	80	+ . 03	
37. 0	65. 1	2. 91	− . 23	− . 22	80	− . 20	− . 06
38. 0	64. 1	2. 84	+ . 03	+ . 04	80	+ . 05	
38. 8	63. 3	2. 79	− . 17	− . 17	80	− . 15	
40. 2	61. 9	2. 72	+ . 01	+ . 01	80	+ . 02	
41. 6	60. 5	2. 66	− . 06	− . 07	80	− . 05	
42. 6	59. 5	2. 62	− . 03	− . 04	80	− . 02	− . 03
42. 7	59. 4	2. 61	− . 05	− . 06	183	− . 04	
43. 2	58. 9	2. 60	+ . 08	+ . 07	234	+ . 09	
43. 3	58. 8	2. 59	− . 03	− . 04	155	− . 02	
43. 6	58. 5	2. 58	+ . 24	+ . 23	134	+ . 25	
44. 0	58. 1	2. 57	− . 08	− . 09	136	− . 07	+ . 04
44. 2	57. 9	2. 57	− . 17	− . 18	80	− . 16	
44. 9	57. 2	2. 55	+ . 08	+ . 07	82	+ . 09	
45. 3	56. 8	2. 54	+ . 04	+ . 03	80	+ . 05	
46. 2	55. 9	2. 52	+ . 20	+ . 19	193	+ . 21	
46. 4	55. 7	2. 52	+ . 12	+ . 11	139	+ . 13	+ . 06
46. 9	55. 2	2. 51	+ . 01	0	95	+ . 02	
47. 7	54. 4	2. 50	− . 15	− . 16	80	− . 14	
47. 7	54. 4	2. 50	+ . 15	+ . 13	184	+ . 16	
47. 9	54. 2	2. 49	− . 12	− . 14	93	− . 11	
48. 2	53. 9	2. 49	+ . 01	− . 01	125	+ . 02	− . 01
48. 6	53. 5	2. 48	0	− . 02	108	+ . 01	
49. 2	52. 9	2. 48	− . 10	− . 12	100	− . 09	
49. 9	52. 2	2. 48	− . 20	− . 22	273	− . 19	
49. 9	52. 2	2. 48	+ . 09	+ . 07	118	+ . 10	
50. 1	52. 0	2. 48	+ . 33	+ . 31	99	+ . 34	+ . 03
			± . 11	± . 11		± . 11	

Refraction, Comparison with Cape II., 1900

Decl.	Z_w	Wt.	C−W Δδ	v_9	(C)−W Δδ	v_{11}	v'
°	°		"	"	"	"	" "
−36	−75	58	+0. 17	−0. 04	+0. 53	+0. 02	+0. 26
−34	−73	92	+ . 10	− . 04	+ . 47	. 00	+ . 24
−32	−71	146	+ . 14	+ . 07	+ . 52	+ . 09	+ . 32
−30	−69	174	− . 06	− . 08	+ . 33	− . 07	+ . 16
−28	−67	278	. 00	+ . 01	+ . 40	+ . 02	+ . 25+0. 25
−26	−65	398	+ . 01	+ . 06	+ . 41	+ . 07	+ . 29
−24	−63	224	− . 03	+ . 06	+ . 38	+ . 06	+ . 27
−22	−61	415	− . 13	. 00	+ . 29	. 00	+ . 19
−20	−59	225	− . 19	− . 02	+ . 23	− . 04	+ . 15
−18	−57	508	− . 24	− . 05	+ . 18	− . 06	+ . 12+ . 20
−16	−55	482	− . 19	+ . 04	+ . 24	+ . 03	+ . 20
−14	−53	518	− . 21	+ . 05	+ . 22	+ . 04	+ . 20
−12	−51	536	− . 28	+ . 01	+ . 16	+ . 01	+ . 16
−10	−49	994	− . 33	. 00	+ . 11	. 00	+ . 12
− 8	−47	837	− . 36	. 00	+ . 08	. 00	+ . 11+ . 15
− 6	−45	792	− . 38	+ . 01	+ . 06	+ . 01	+ . 11
− 4	−43	589	− . 56	− . 14	− . 12	− . 14	− . 06
− 2	−41	675	− . 53	− . 08	− . 10	− . 09	− . 02
0	−39	996	− . 46	+ . 01	− . 03	+ . 01	+ . 07
+ 2	−37	750	− . 56	− . 06	− . 13	− . 06	− . 02+ . 02
+ 4	−35	830	− . 57	− . 06	− . 15	− . 06	− . 03
+ 6	−33	935	− . 52	+ . 01	− . 10	. 00	+ . 02
+ 8	−31	1058	− . 48	+ . 06	− . 08	+ . 05	+ . 06
+10	−29	1295	− . 50	+ . 05	− . 11	+ . 04	+ . 03
+12	−27	1000	− . 54	+ . 02	− . 16	+ . 02	. 00+ . 02
+14	−25	682	− . 55	. 00	− . 18	+ . 01	− . 02
+16	−23	572	− . 59	− . 04	− . 22	− . 03	− . 07
+18	−21	635	− . 54	. 00	− . 19	− . 01	− . 04
+20	−19	907	− . 57	− . 05	− . 24	− . 05	− . 10
+22	−17	582	− . 45	+ . 05	− . 13	+ . 05	. 00− . 05
+24	−15	497	− . 45	+ . 02	− . 15	+ . 03	− . 03
+26	−13	482	− . 41	+ . 02	− . 13	+ . 04	− . 02
+28	−11	500	− . 38	+ . 01	− . 12	+ . 04	− . 02
+30	− 9	376	− . 37	− . 02	− . 13	+ . 02	− . 05
+32	− 7	347	− . 39	− . 10	− . 18	− . 05	− . 12− 05
+34	− 5	290	− . 20	+ . 02	− . 02	+ . 09	+ . 03
+36	− 3	158	− . 14	. 00	. 00	+ . 09	+ . 03
+40	+ 1	98	[+ . 19]	[+ . 15]	[+ . 25]	[+ . 32]	[+ . 24]
				± . 04		± . 04	

Refraction, Comparison with San Luis, 1910

Decl.	Z_w	Wt.	SL − W $\Delta\delta$	v_{12}	(SL) − W $\Delta\delta$	v_{14}	v'	
°	°		″	″	″	″	″	″
−36	−75	78	+0.23	−0.22	+0.37	−0.23	+0.10	
−34	−73	119	+ .25	− .09	+ .41	− .08	+ .18	
−32	−71	160	+ .27	+ .02	+ .47	+ .06	+ .27	
−30	−69	205	+ .25	+ .07	+ .48	+ .14	+ .31	
−28	−67	274	+ .20	+ .07	+ .44	+ .16	+ .29	+0.23
−26	−65	390	+ .14	+ .07	+ .37	+ .14	+ .24	
−24	−63	260	+ .18	+ .15	+ .39	+ .20	+ .28	
−22	−61	321	− .08	− .06	+ .14	− .02	+ .04	
−20	−59	56	− .15	− .10	+ .09	− .02	+ .01	
−18	−57	201	− .08	+ .01	+ .12	+ .04	+ .06	+ .13
−16	−55	264	− .21	− .09	− .07	− .12	− .11	
−14	−53	229	− .06	+ .09	+ .15	+ .13	+ .13	
−12	−51	284	− .20	− .02	− .04	− .04	− .04	
−10	−49	925	− .26	− .05	− .06	− .03	− .05	
− 8	−47	617	− .26	− .01	− .06	− .01	− .03	− .02
− 6	−45	582	− .30	− .03	− .09	− .01	− .04	
− 4	−43	396	− .40	− .10	− .15	− .05	− .09	
− 2	−41	511	− .33	− .01	− .15	− .04	− .07	
0	−39	759	− .34	.00	− .11	+ .02	− .01	
+ 2	−37	567	− .48	− .12	− .22	− .07	− .11	− .06
+ 4	−35	798	− .42	− .04	− .16	+ .01	− .04	
+ 6	−33	870	− .32	+ .08	− .05	+ .13	+ .08	
+ 8	−31	1080	− .33	+ .08	− .08	+ .12	+ .06	
+10	−29	1156	− .35	+ .08	− .11	+ .10	+ .03	
+12	−27	854	− .46	− .02	− .22	.00	− .07	+ .01
+14	−25	534	− .61	− .16	− .41	− .18	− .26	
+16	−23	496	− .57	− .11	− .32	− .08	− .17	
+18	−21	345	− .57	− .11	− .29	− .04	− .14	
+20	−19	658	− .41	+ .05	− .12	+ .13	+ .02	
+22	−17	368	− .39	+ .07	− .29	− .03	− .16	− .14
+24	−15	434	− .37	+ .09	− .32	− .05	− .20	
+26	−13	221	− .58	− .12	− .46	− .19	− .35	
+28	−11	523	− .35	+ .10	− .27	.00	− .17	
+30	− 9	140	− .38	+ .06	− .30	− .03	− .22	
+32	− 7	157	− .53	− .08	− .56	− .28	− .50	
+34	− 5	170	− .34	+ .07	− .11	+ .17	− .06	− .25
+36	− 3	93	− .41	− .01	− .30	− .02	− .27	
+38	− 1	159	− .37	+ .01	− .13	+ .15	− .12	
+40	+ 1	132	− .32	+ .03	− .16	+ .12	− .17	
+42	+ 3	133	− .17	+ .15	− .09	+ .19	− .12	
+45	+ 6	67	− .35	− .09	− .32	− .04	− .37	
+48	+ 9	66	− .35	− .19	− .36	− .08	− .43	− .25
				± .08		± .09		

Refraction, Comparison with Boss, 1900

Decl.	Z	B−W Δδ	(B)−W Δδ	v_7	$v_{5,4}$	v_{24}	v'	
°	°	″	″	″	″	″	″	″
− 35	−74	+0.03	+0.40	+0.19	−0.05	+0.09	+0.15	
− 31	−70	+ .03	+ .39	+ .20	+ .02	+ .15	+ .20	
− 27	−66	+ .02	+ .36	+ .19	+ .08	+ .18	+ .22	
− 23	−62	− .06	+ .26	+ .12	+ .01	+ .13	+ .15	
− 19	−58	− .17	+ .13	+ .04	− .05	+ .06	+ .06	+0.16
− 16	−55	− .19	+ .10	+ .04	− .03	+ .07	+ .06	
− 14	−53	− .12	+ .16	+ .14	+ .06	+ .07	+ .14	
− 12	−51	− .20	+ .06	+ .06	.00	+ .08	+ .06	
− 10	−49	− .24	.00	+ .02	− .02	+ .05	+ .01	
− 8	−47	− .23	.00	+ .05	+ .01	+ .08	+ .03	+ .06
− 6	−45	− .25	− .03	+ .05	+ .03	+ .07	+ .02	
− 4	−43	− .39	− .18	− .07	− .09	− .05	− .11	
− 2	−41	− .36	− .15	− .01	− .03	− .01	− .07	
0	−39	− .34	− .13	+ .03	+ .02	+ .04	− .03	
+ 2	−37	− .47	− .26	− .07	− .07	− .06	− .15	− .07
+ 4	−35	− .48	− .26	− .05	− .04	− .04	− .14	
+ 6	−33	− .41	− .18	+ .04	+ .06	+ .05	− .05	
+ 8	−31	− .42	− .18	+ .06	+ .09	+ .06	− .04	
+ 10	−29	− .47	− .22	+ .03	+ .06	+ .03	− .07	
+ 12	−27	− .57	− .31	− .04	− .01	− .05	− .16	− .09
+ 14	−25	− .68	− .41	− .14	− .10	− .15	− .26	
+ 16	−23	− .68	− .39	− .12	− .07	− .13	− .24	
+ 18	−21	− .67	− .37	− .10	− .04	− .11	− .22	
+ 20	−19	− .62	− .31	− .05	+ .02	− .06	− .17	
+ 22	−17	− .57	− .26	− .01	+ .06	− .01	− .13	− .20
+ 24	−15	− .57	− .25	− .01	+ .06	− .02	− .13	
+ 26	−13	− .65	− .33	− .11	− .02	− .11	− .22	
+ 28	−11	− .56	− .24	− .04	+ .06	− .04	− .14	
+ 31	− 8	− .66	− .34	− .17	− .07	− .17	− .27	
+ 36	− 3	− .56	− .24	− .14	− .01	− .13	− .21	− .19
+ 42	+ 3	− .39	− .11	− .10	.00	− .08	− .09	
+ 48	+ 9	− .27	− .03	− .11	− .02	− .08	− .11	
+ 52	+13	− .23	− .04	− .17	− .09	− .13	− .15	
+ 58	+19	− .05	+ .10	− .08	− .01	− .05	− .04	
+ 64	+25	+ .10	+ .22	+ .01	+ .08	+ .04	+ .07	− .06
+ 67	+28	+ .13	+ .23	+ .02	+ .08	+ .04	+ .08	
+ 70	+31	− .12	− .03	− .22	− .16	− .21	− .16	
+ 74	+35	.00	+ .07	− .12	− .06	− .11	− .05	
+ 77	+38	− .02	+ .04	− .13	− .08	− .13	− .06	
+ 82	+43	− .04	.00	− .13	− .08	− .14	− .07	− .05
+ 82	+43	+ .11	+ .15	+ .02	+ .07	+ .01	+ .09	
+ 83	+44	+ .14	+ .18	+ .06	+ .11	+ .04	+ .12	
+ 83	+44	− .08	− .04	− .16	− .11	− .18	− .10	
+ 84	+45	+ .07	+ .10	− .02	+ .04	− .03	+ .05	
+ 85	+46	+ .28	+ .31	+ .20	+ .26	+ .19	+ .27	+ .09
+ 86	+47	+ .03	+ .06	− .04	+ .02	− .06	+ .03	
+ 87	+48	+ .03	+ .05	− .04	+ .02	− .06	+ .03	
+ 88	+49	+ .18	+ .19	+ .12	+ .17	+ .09	+ .18	
+ 89	+50	+ .08	+ .08	+ .01	+ .06	− .02	+ .07	
+ 91	+52	.00	.00	− .05	.00	− .07	+ .01	+ .06
+ 92	+53	− .22	− .21	− .24	− .21	− .27	− .19	
+ 93	+54	− .08	− .06	− .07	− .05	− .10	− .03	
+ 94	+55	+ .06	+ .09	+ .09	+ .11	+ .07	+ .13	
+ 95	+56	− .12	− .09	− .07	− .07	− .09	− .04	
+ 96	+57	− .14	− .11	− .08	− .08	− .09	− .05	− .04

Refraction, Comparison with Boss, 1900—Continued

Decl.	Z	B − W Δδ	(B)—W Δδ	v_7	$v_{5.4}$	v_{24}	v'	
°	°	″	″	″	″	″	″	″
+ 97	+58	+0.08	+0.12	+0.17	+0.16	+0.15	+0.19	
+ 97	+58	− .17	− .13	− .08	− .09	− .10	− .06	
+ 98	+59	− .01	+ .03	+ .10	+ .07	+ .08	+ .11	
+ 98	+59	+ .04	+ .08	+ .15	+ .12	+ .13	+ .16	
+103	+64	− .09	− .03	+ .10	+ .03	+ .11	+ .10	+0.10
+106	+67	− .03	+ .04	+ .20	+ .09	+ .23	+ .19	
+110	+71	− .06	+ .03	+ .23	+ .07	+ .29	+ .23	
+113	+74	− .01	+ .09	+ .32	+ .11	+ .42	+ .34	+ .25
				± .10	± .07	± .10	± .12	

Seasonal terms.—There were not sufficient numbers of observations at large zenith distances for separation of daily and annual terms in the refraction solutions. The small variations of the declinations during the night shown below do not vary with zenith distance as refraction effects. Such variations are noted in connection with the day observations and in connection with observations of the north and south refraction pairs.

A seasonal effect was searched for in the comparison of declinations with Cape II by making two solutions, one for stars of right ascension 3 to 11 hours, observed at Washington in winter and at Cape in summer, and the other for stars of right ascension 15 to 23 hours, observed at Washington in summer and at Cape in winter. There were some 10,000 observations in each group giving the results:

R. A. 3^h–11^h, $\Delta\delta = -0\overset{''}{.}51 - 0\overset{''}{.}37 \tan Z + 0\overset{''}{.}11 \sin 4Z + 0\overset{''}{.}29 \tan Z_c$

R. A. 15^h–23^h, $\Delta\delta = -0.28 - 0.15 \tan Z + 0.20 \sin 4Z + 0.17 \tan Z_c$

The coefficients of tan Z vary with opposite sign as to seasons at the two observatories, and are doubtless largely solutional, for by neglecting the other terms the coefficients of tan Z become $-0''.25$ and $-0''.22$, showing no seasonal change. Similarly by neglecting other terms the coefficients of tan Z_c become $-0''.13$ and $-0''.13$.

VARIATION OF DECLINATION DURING THE NIGHT

The 5,246 declination observations of the clock stars in the first five years were examined for daily and annual variations. The mean of the declinations of each star was taken from all observations of that star and group means of such residuals were formed for each hour of right ascension for each two hours of mean time of transit, showing a quite small yet persistent variation during the night, and practically no seasonal variation.

Variation of Declination During the Night, Equatorial Stars

P. M. 5	6	7	8	9	10	11	M. N.	1	2	3	4	5	6	7 A. M.
Δδ +″05	+″05	+″07	+″08	+″01	+″04	+″01	−″03	−″01	−″07	−″05	−″05	−″02	−″04	−″04

The variation was found to be the same for stars south of the equator and for stars near the zenith.

The 17 azimuth stars were observed regularly in declination at the ends of the night, and group means were formed of the 2,300 observations in the 12 years showing the following difference:

Pole stars, Morning minus Evening, $\Delta\delta = -0''.01$.

The small variations in declination do not increase with zenith distance nor change sign at the zenith, and hence are probably not refraction effects.

For an examination of the variation of refraction at various hours of the night the declinations of the two pairs of stars, θ *Ceti* and α *Urs. Min.*, and α *Virg.* and α *Urs. Min. S. P.* were observed as opportunity afforded. The stars in a pair culminate within a few minutes of each other, the one 50° south and the other 50° north of the zenith, and the two pairs come at opposite seasons. In the column D_1 in the table below is given the variation of the arc between the two stars of a pair, a positive sign indicating an arc greater than the mean. Daylight observations are in italics. In the column D_2 the variations are given when the observations have had applied to them the corrections for daily and annual refraction as given in HARZER's refraction tables, in the form given by DNEPROVSKY. The residuals are somewhat reduced by the use of these terms in the refraction, especially in the daytime. The residuals in the tabulation of the clock and azimuth declinations are only slightly changed by such terms.

Variation of Arcs of Declination

θ Ceti minus α Urs. Min.				α Virg. minus α Urs. Min. S. P.			
Date	No.	D_1	D_2	Date	No.	D_1	D_2
		″	″			″	″
July 6 a. m.	10	*−0. 32*	*−0. 02*	Jan. 6 a. m.	27	−0. 01	0. 00
Aug. 4 a. m.	16	− . 16	+ . 14	Feb. 4 a. m.	13	+ . 18	+ . 07
Sept. 2 a. m.	16	− . 04	+ . 06	Mar. 2 a. m.	13	+ . 16	− . 02
Oct. 0 a. m.	27	+ . 06	− . 08	Apr. 0 a. m.	17	+ . 16	+ . 10
Nov. 10 p. m.	15	− . 01	− . 19	May 10 p. m.	10	− . 22	− . 12
Dec. 8 p. m.	28	+ . 11	+ . 05	Jun. 8 p. m.	17	− . 27	− . 02
Jan. 6 p. m.	25	+ . 03	+ . 01	July 6 p. m.	6	*− . 26*	*+ . 06*
Feb. 4 p. m.	10	*+ . 10*	*+ . 08*	Aug. 4 p. m.			
				Sept. 2 p. m.	22	*− . 17*	*+ . 20*
				Oct. 0 p. m.	10	*− . 70*	*− . 43*
				Nov. 10 a. m.	28	*− . 50*	*− . 35*

ABOVE POLE MINUS BELOW POLE

The differences between the declinations above and below pole for each of the circumpolars are given on pages 74–76. Group means of these differences were formed arranged according to declination and also according to right ascension, as given in the following summary:

Above Pole minus Below Pole

Decl.	Δδ	R. A.	Δδ
°	″	h	″
88. 6	+0. 03	1. 5	+0. 07
86. 6	− . 04	4. 5	− . 09
84. 4	− . 11	7. 5	− . 12
82. 8	+ . 07	10. 5	+ . 03
82. 6	− . 06	13. 5	. 00
77. 0	+ . 04	16. 5	− . 06
72. 2	+ . 06	19. 5	− . 07
67. 8	− . 09	22. 5	+ . 13

These results show that the polar coordinates were sufficiently controlled.

EQUATOR POINT CORRECTION

As shown on page 73 the average correction to the Ephemeris is zero for the observations of the Sun, Moon, and planets reduced on the final declination system of the catalogue, and therefore there is no correction for equator point. The declinations of this catalogue give a correction of +0″.07 to Newcomb's equatorial declinations.

PROBABLE ERRORS

For the determination of the usual probable errors, residuals from means were used for the region of the clock and azimuth stars, and differences between two observations of a star for those at other declinations. The number of observations used and the errors for different zones are given below.

Probable Error of a Single Observation in Declination

Decl.	tan Z	No. Obs.	Prob. Error
° °			″
−35 to −25	2. 5	1, 054	±0. 37
−16 to 0	0. 6	2, 226	± . 30
0 to +15	0. 6	2, 021	± . 26
+15 to +30	0. 3	1, 630	± . 25
+50 to +60	0. 3	1, 132	± . 24
+80 to +85	0. 9	449	± . 26
+85 to +89	1. 1	778	± . 32
+89 to +85 S. P.	1. 4	753	± . 32
+85 to +80 S. P.	1. 7	481	± . 32
+80 to +66 S. P.	2. 8	490	± . 46

The above probable errors may be expressed thus:

$$r^2 = (0''.258)^2 + (0''.124)^2 \tan^2 Z$$

The final declinations were examined and computations verified for discordances larger than four times the probable error, and observations that stood out from the mean as much as six times the probable error were rejected.

SUN, MOON, AND PLANET REDUCTIONS

NIGHT OBSERVATIONS MINUS DAY OBSERVATIONS

As stated on page 18, 91 of the brighter stars between +39° and −30° declination were observed in the daytime, with the Sun, in the years 1918.5 to 1925.2. The 3,600 observations of these stars were compared with night observations of the same stars during the same epoch, furnishing the differences in right ascension and declination, night minus day, as given for each star in the table on page 65, columns 3 to 6. Group means of the differences in right ascension are as follows:

Night minus Day, Right Ascensions

R. A.	N−D	Decl.	N−D	Clamp	N−D
h h	s	° °	s		s
0– 2	+0. 042	−30 to −20	+0. 035	West	+0. 038
3– 5	. 054	−18 to − 8	. 043	East	+. 042
6– 8	. 040	− 5 to +10	. 038		
9–11	. 045	+10 to +20	. 036	Mean	+ . 040
12–14	. 029	+20 to +30	. 040		
15–17	. 032	+30 to +39	+ . 037		
18–20	. 038				
21–23	+ . 032				

The small annual variation was neglected and the mean, $+0^{s}.040$, was taken as a constant correction to all day work to reduce it to the night basis. As explained on page 28, all day work was at first reduced using night clock corrections. The difference night minus day is largely personal equation, as the corresponding quantity given by the machine, which is fairly uniform for different observers, is $+0^{s}.036$. However, the difference in the observations themselves should include, besides personal equation, any day term in instrumental constants or in clock corrections; the value from the observations has therefore been used.

Group means of the differences in declination arranged according to right ascension show but little variation with the seasons. The group means arranged according to declination are as follows:

Night minus Day, Declinations

Decl.	Cl. W	No. Obs.	Cl. E	No. Obs.	W−E	Mean	Mean	v
°	″		″		″	″	″	″
−26	+0. 01	29	−0. 18	23	+0. 19	−0. 08	+0. 09	−0. 04
−15	+ . 43	36	− . 04	23	+ . 47	+ . 19	+ . 30	− . 04
− 9	+ . 75	60	+ . 11	49	+ . 64	+ . 43	+ . 52	+ . 05
− 2	+ . 96	37	+ . 31	48	+ . 65	+ . 63	+ . 70	+ . 09
+ 5	+ . 95	50	+ . 55	39	+ . 40	+ . 75	+ . 80	+ . 08
+ 9	+ . 89	82	+ . 51	64	+ . 38	+ . 70	+ . 75	− . 03
+15	+ . 95	156	+ . 53	143	+ . 42	+ . 74	+ . 78	− . 05
+25	+ . 91	184	+ . 59	148	+ . 32	+ . 75	+ . 77	− . 06
+34	+ . 91	90	+ . 57	60	+ . 34	+ . 74	+ . 75	− . 01
Mean	+ . 87		+ . 47		+ . 40			

The night minus day declinations may be expressed as follows:

$$(N-D), \quad \Delta\delta = +0''.70 + 0''.20 \sin 4Z - 0''.25 \tan Z$$

giving the residuals in the last column of the table.

As compared with the Ephemeris, the observations of the Sun show a similar variation with declination, and a similar clamp difference, as follows:

Sun Observations

Decl.	Eph.−Obs.					Eph.−Obs. Corr'd	
	Cl. W	No.	Cl. E	No.	W—E	Cl. W	Cl. E
° °	″		″		″	″	″
−23 to −17	−0. 19	59	−0. 48	55	+0. 29	−0. 46	−0. 35
−16 to − 6	+ . 19	66	− . 46	52	+ . 65	− . 36	− . 61
− 5 to + 5	+ . 75	60	+ . 15	50	+ . 60	− . 13	− . 33
+ 6 to +16	+ . 89	49	+ . 43	57	+ . 46	− . 03	− . 09
+17 to +23	+ . 86	60	+ . 15	73	+ . 71	− . 08	− . 39
Mean					+ . 55		

A similar clamp difference, 0″.44, was found in the Sun observations 1903–1913. (See Vol. IX, p. A cliv.)

The clamp difference which appears in all day declinations, and which is fairly constant for different declinations, is probably due largely to a systematic difference in the day nadirs on the two clamps as is shown by the comparison with night nadirs:

Night Nadirs minus Day Nadirs, Cl. W., +0″.21 (440 284)
Night Nadirs minus Day Nadirs, Cl. E., +0″.63 (446 299)

giving the clamp difference, 0″.42, which is the same as the clamp difference 0″.40 in the declinations.

For the declinations, as for the right ascensions, it is considered that the differences between the observations of the stars taken at night and those taken shortly before and after the Sun, and at similar declinations, afford the best corrections available to the positions of the day objects, and also the proper means of eliminating day terms and reducing the Sun to the basis of the night work for use in the determination of equinox and equator point. The means of the two clamps were plotted and a smooth curve drawn for the variation with declination. From this curve, plus or minus a constant 0″.20 for clamp, the corrections for day observations were determined as given in the following table, and all observations of the Sun, Mercury, and Venus were corrected accordingly. The observations of the day stars were not used for positions.

Day Corrections to the Declinations of the Sun, Mercury, and Venus

Decl.	Cl. W	Cl. E	Decl.	Cl. W.	Cl. E
°	″	″	°	″	″
−25	+0.11	−0.29	+ 5	+0.91	+0.51
−20	+ .27	− .13	+10	+ .92	+ .52
−15	+ .42	+ .02	+15	+ .93	+ .53
−10	+ .58	+ .18	+20	+ .94	+ .54
− 5	+ .74	+ .34	+25	+ .94	+ .54
0	+ .88	+ .48			

All refractions were computed using the readings of the thermometer over the instrument. At night there was no difference between this thermometer and the one in the outer shelter, both of which were always read. But in the middle of the day the instrument thermometer read 0°.7 F. higher than the outer one, with a small variation, as shown by the following differences:

December, January, February	+0.79
March, April, May	+ .62
June, July, August	+ .41
September, October, November	+ .84

Using the outer thermometer, the day observations as reduced require the correction +0″.08 tan Z. The night minus day declinations so reduced are given in the next to the last column of the table on page 62.

The day terms found in the work of the 6-inch transit circle (see Vol. XI, p. 92) are quite similar to those found here. The two buildings are identical in form, and a suggestion has been made that the day terms are partly due to the forms of the buildings. The line of sight passes from the top horizontal shutter into the end vertical shutter at declination −6°. The night minus day is fairly constant from the zenith to the equator and then decreases rather rapidly and uniformly. The declinations observed on the prime vertical transit instrument were 0″.5 less at noon than at night. The correction for diurnal in Professor Harzer's tables is 0″.15 tan Z, while that found at Pulkowa is 0″.18 tan Z. The present observations give similar results in the daytime, but not at night.

Night Observations Minus Day Observations

Star		Δα		Δδ		Star		Δα		Δδ	
α	δ	Cl W	Cl E	Cl W	Cl E	α	δ	Cl W	Cl E	Cl W	Cl E
h	°	s	s	″	″	h	°	s	s	″	″
12.9	+38.8	+0.012	--------	+0.97	--------	18.1	+9.6	−0.008	+0.048	+0.48	+0.87
18.6	38.7	+ .043	+0.037	+ .82	+0.56	21.7	9.5	+ .027	+ .022	+1.03	+ .57
14.5	38.7	+ .019	--------	+ .68	-----	16.9	9.5	+ .031	+ .025	+ .73	+ .50
1.1	35.2	+ .021	+ .035	+ .98	+ .24	8.2	9.4	+ .038	-------	+1.00	--------
9.3	34.7	+ .050	+ .019	+ .99	+ .50	3.3	8.7	-------	+ .098	-----	+ .35
6.8	34.1	+ .056	-	+ .82	----	19.8	8.7	+ .032	+ .051	+ .54	+ .39
20.7	33.7	+ .053	+ .015	+ .73	+ .73	7.4	8.5	+ .057	+ .041	+1.20	+ .40
11.2	33.5	+ .041	+ .095	+ .96	+ .48	2.4	8.1	-------	-------	-------	--------
4.9	33.0	-------	-------	-------	-------	5.8	7.4	+ .049	+ .063	+1.28	+ .74
18.9	32.6	+ .034	+ .035	+ .96	+ .64	4.8	6.8	-------	-------	-------	--------
7.5	32.1	+ .032	+ .032	+ .97	+ .62	8.7	6.7	+ .047	+ .037	+1.14	+ .74
3.8	31.6	+ .038	+ .074	+1.34	+ .92	15.7	6.7	+ .032	+ .056	+ .78	+ .36
21.2	29.9	+ .025	+ .037	+ .51	+ .56	23.9	6.4	-------	----	-----	--------
22.7	29.8	+ .066	+ .033	+ .58	+ .57	8.9	6.2	+ .030	+ .051	+1.05	+ .64
0.1	28.6	+ .061	+ .040	+ .95	+ .62	7.6	5.4	+ .045	+ .034	+1.19	+ .77
5.4	28.5	+ .064	+ .074	+1.25	+ .80	23.6	5.2	-------	-------	-------	--------
7.7	28.2	+ .017	+ .044	+1.27	+1.25	17.7	4.6	+ .030	+ .021	+ .83	+ .56
19.5	27.8	+ .043	+ .039	+ .80	+ .52	3.0	+3.8	+ .048	+ .058	+ .66	+ .32
14.7	27.4	+ .031	+ .026	+ .99	+ .39	5.5	−0.4	+ .059	+ .074	+1.16	+ .38
15.5	27.0	+ .030	+ .044	+ .94	+ .64	22.0	0.7	+ .016	+ .028	+ .49	+ .41
2.8	26.9	+ .038	----	+ .92	-------	5.5	1.3	+ .029	+ .057	+1.48	+ .26
6.7	25.2	+ .042	+ .047	+1.46	+. 56	5.6	2.0	+ .049	------	+ .89	-------
17.2	24.9	+ .052	+ .005	+ .96	+ .80	16.2	3.5	+ .030	+ .053	+ .84	+ .32
22.8	24.2	+ .067	+ .042	+ .91	+ .48	21.5	5.9	+ .044	+ .042	+ .92	+ .32
9.7	24.1	+ .035	+ .038	+ .81	+ .54	5.2	8.3	+ .062	+ .054	+ .85	− .08
3.7	23.9	+ .047	+ .024	+1.20	+ .31	9.4	8.3	+ .019	+ .080	+1.09	+ .14
10.2	23.8	+ .059	+ .038	+1.14	+ .87	1.3	8.6	-------	+ .041	------	− .20
2.0	23.1	+ .051	+ .034	+ .77	+ .31	15.2	9.1	+ .059	− .007	+1.17	+ .08
16.4	21.7	+ .042	− .002	+1.00	+ .52	5.7	9.7	+ .036	+ .018	+ .79	+ .60
11.2	21.0	+ .052	+ .040	+ .95	+ .63	16.5	10.4	.007	----	+ .28	------
1.8	20.4	+ .043	+ .043	+ .70	+ .52	13.3	10.7	+ .051	+ .024	+ .45	+ .21
14.2	19.6	+ .018	+ .018	+ .99	+ .61	20.2	12.8				
4.4	19.0	-------	+ .062	---	+ .67	17.1	15.6	+ .017	--	+ .71	-------
13.8	18.8	+ .035	+ .022	+1.03	+ .42	14.8	15.7				
6.6	16.5	+ .044	+ .093	+1.23	+ .60	10.8	15.8	+ .066		+ .36	---
4.5	16.4	+ .029	+ .066	+1.39	+ .74	6.7	16.6	+ .051	+ .056	+ .49	− .18
20.6	15.6	+ .022		+ .82		12.2	17.1		+ .010		− .19
11.7	15.0	+ .042	+ .030	+1.16	+ .75	6.3	17.9	+ .037		+ .60	------
1.5	14.9	+ .042	+ .062	+ .69	+ .39	0.7	18.4	+ .042	+ .049	+ .18	+ .20
23.0	14.8	+ .031	+ .031	+ .99	+ .47	15.9	22.4		+ .084		+1.15
0.2	14.7	+ .042	+ .041	+ .76	+ .42	16.4	26.3	+ .007	+ .020	+ .34	− .37
19.0	13.7	+ .037	+ .025	+ .67	+ .56	7.1	26.3	+ .029	+ .055	+ .25	+ .14
17.5	12.6	+ .045	+ .012	+ .89	+ .55	18.8	26.4	+ .017	+ .049	+ .07	− .02
10.1	12.4	+ .041	+ .061	+ .84	+ .30	6.9	28.9	+ .026		− .16	
13.0	11.6	+ .017	+ .024	+ .88	+ .58	22.9	−30.0	+ .023	+ .051	− .41	− .76
19.7	+10.4	+ .039	+ .042	+ .67	+ .47						

SUN, MOON, AND PLANETS

The observations of the Sun, Moon, and planets were reduced as the observations of the stars except as noted below. The corrections for defection and for reduction to the meridian for motion were applied where necessary. In correcting the Moon for parallax Hayford's spheroid was used, and for other objects the tables in Appendix II, Volume IV, were used.

The group night clock corrections as described on page 28 were used in reducing the observations of the Sun, Mercury, and Venus. Observations of the Moon and outer planets were reduced as the night stars with clock corrections determined near them by the same observer.

For the Sun, Mercury, and Venus, corrections were applied for the differences between night and day observations as just described.

The derivation of the corrections for personal equation in right ascension has been fully explained and all observations were corrected according to the final corrections for personal equation given on page 33. It is to be noted that the corrections for personal equation for the Moon, Mercury, and Venus are for the limbs, and they therefore affect the observed semidiameters. No corrections for personal equation in declination were applied except the relative equations for the Sun as given on page 49.

Single limbs of the Moon and Venus were observed in both right ascension and declination, and in right ascension the limbs of Mercury were largely observed. Such observations were reduced to the center, using the semidiameters given in the Ephemeris. For the Moon these reductions were afterwards corrected by a correction to the Ephemeris semidiameter given by the observations themselves as explained below. For the declinations of Mercury and for both coordinates of the Sun and outer planets either the center or both limbs of a diameter were always observed. The only final positions depending on Ephemeris semidiameters are therefore the right ascension and declination of Venus, and the right ascension of Mercury when a limb was observed.

Observed corrections to Ephemeris semidiameters.—Corrections to the Ephemeris semidiameter of the Moon were determined as follows: After applying to the right ascensions corrections for personal equation which were for each observer different for the two limbs, and which decreased the semidiameter by $0^s.032$, mean values of the correction to the Ephemeris right ascension and declination were formed for each limb reduced to the center with the Ephemeris semidiameter, in three different groups; the first group (*a*) including those observations when both limbs of a diameter were observed on the same night; the second group (*b*) including those observations when a single limb was observed within four days of full Moon; the third group (*c*) including all observations.

The differences in the mean corrections to the Ephemeris right ascension and declination for the two limbs were taken as corrections to the Ephemeris semidiameter.

Corrections to the Ephemeris Semidiameter of the Moon

Moon	½ (II−I)	No.	½ (N−S)	No.
	s		″	
(*a*) Both limbs, same night	−0. 099	50	−1. 14	184
(*b*) Single limbs, within four days of full Moon	− . 088	369	−1. 10	151
(*c*) All observations	− . 089	825	−1. 14	853
Adopted	− . 089		−1. 14	

The observations 1923–1925 compared with Brown's tables, gave a slightly smaller negative correction than the above; however, the adopted values above were applied to all observations.

After having applied to the right ascensions corrections for personal equation, which were different for each limb, and taking the differences between the mean corrections to the Ephemeris for Venus and Mercury according to the limb observed, the following corrections to the Ephemeris semidiameters were indicated. These have not been used.

Corrections to Ephemeris Semidiameters of Planets

Venus	Mercury
R. A. ½ (II–I), +0.ˢ046	R. A. ½ (II–I), +0.ˢ002
Decl. ½ (N–S), +0.″07	

The observations of the Sun, Mars, Jupiter, and Saturn gave directly the following corrections to the Ephemeris semidiameters. They have no corrections for personal equation on the limb in them. These have not been used.

Corrections to Ephemeris Semidiameters

Obsr	Sun				Mars		Jupiter		Saturn	
	Δα		Δδ		Δα		Δα		Δα	
	s		″		s		s		s	
M	−0.041	57	−1.20	56	−0.003	21	−0.043	29	−0.027	41
P	+ .019	177	− .51	180	+ .098	38	+ .078	44	+ .063	57
Fp					− .058	5			− .060	5
S							− .072	11	− .043	11
Sr	− .051	35	−1.22	36	− .071	16	− .100	18	− .046	19
Bn	− .038	145	−1.12	146	+ .060	14	+ .050	16	+ .026	16
Ry	− .009	169	− .26	173	+ .026	21	+ .011	24	− .011	18
Mean	− .013		− .70		+ .031		+ .005		+ .006	

Correction to Ephemeris Semidiameter of Sun

Season	Δα		Δδ	
	s		″	
February, March, April	0.010	130	−0.75	133
May, June, July	.023	148	− .71	150
August, September, October	.010	173	− .67	176
November, December, January	.007	132	− .72	132

Corrections to tabular values.—The corrections to the Ephemeris given in the collected results on pages 103–160 are the corrections to the positions in the American Ephemeris as given for transit at Washington, except in the case of Mars. Beginning

1922.0 Ross's new tables of Mars have been used in the Ephemeris, and the comparison is made directly with the Ephemeris. Before 1922 the Ephemeris places have been reduced to the basis of these new tables by applying the corrections to the geocentric right ascensions and declinations given in the British Nautical Almanac, 1920, as interpolated to the times of observation at Washington.

The correction to the Ephemeris of the Moon includes a correction for the motion of the Moon in the time interval between the observed and computed times of transit. This at times amounted to as much as $0^s.05$ in right ascension.

The positions of the Moon given in the American Ephemeris beginning 1923.0 are based on BROWN's new tables, and the average correction to the tabular longitude is between $6''$ and $7''$. Before 1923 the Ephemeris positions were those from HANSEN's tables as corrected by NEWCOMB, and the correction to the tabular longitude was some $12''$. With so large corrections in longitude induced terms arose in the comparison with observations. It became necessary therefore to reduce the residuals between observed and Ephemeris places as given in columns 6 and 11, pages 114–130, before investigating the corrections for equator and equinox, which seemed very desirable in the case of the Moon, as it was observed throughout the present series of observations, and in both positions of the circle, while the Sun was observed only in the second position of the circle. Moreover, the Moon was observed at night among the stars, with consequent elimination of day terms.

The method of correcting the tabular positions of the Moon before 1923 is explained in Appendix IV to the present volume, where the Washington observations of the Moon, 1894–1922, are discussed. The tabular place for each observation was corrected by nearly a hundred terms, corresponding to differences between the HANSEN-NEWCOMB theory and BROWN's theory. An additional secular variation in the mean longitude not in BROWN's tables was included. This left a fairly constant residual in longitude between observation and theory for the period 1913–1922 of about $3''$. In the reductions here, $3''.00$ was added to the tabular mean longitude, 1913–1922, so as to render the final residuals as small as possible. The empirical correction, $-0''.50$, to the tabular latitude was applied here also. This term is given by BROWN's discussion of the Greenwich observations, by JONES's revision of NEWCOMB's work on occultations and by the Washington observations, 1894–1922. The observations were corrected also for correction to tabular parallax.

The corrections to the tabular true geocentric longitude and latitude resulting from the computations as just set forth were converted into corrections in right ascension and declination and applied to the Ephemeris places. For the years 1923, 1924, and 1925, in which the Ephemeris places are based on BROWN's tables, the average correction, $6''.6$, to the mean longitude and any induced terms were taken account of by applying to the Ephemeris right ascensions and declinations 0.00334 times their hourly motion given for the transit at Washington. This represents a correction of $2''.3$ in addition to the secular term, $4''.3$, not in the tables. The correction $-0''.50$ to the tabular latitude was not applied for these three years. The comparison of the observations with these corrected tabular places gave "Corr. to Tab. R. A." and "Corr. to Tab. Decl." in columns 7 and 12, pages 114–130. These were finally converted into corrections in longitude and latitude as given in columns 8 and 13 on the same pages.

The Moon observations as discussed and given here are referred to the system of this instrument. In discussing these observations in Appendix IV they were referred to NEWCOMB's system, in which the declinations are nearly the same and the right ascensions are $0^s.02$ larger.

CORRECTIONS TO EQUINOX, EQUATOR, AND OBLIQUITY

On page 50 it is shown that the average observed declination of the Sun, Moon, and planets was nearly the same as the tabular declination when the provisional reductions of the observations were used. With such reductions therefore no further correction for equator point would have been required. However, the further discussions of the refraction and polar point, and consequent small change in declination system made it necessary to further examine the equator point and obliquity while determining the equinox correction.

The corrections to the Ephemeris of the Sun, using the observations as finally corrected for all corrections except that for equinox, were solved in the usual way for corrections to equinox and equator and orbit elements. For an indication of the accuracy of the results the residuals were divided into two groups of a little over three years each, as follows:

Sun (Obs.—Eph.)

Month	1918.5—22.0		1922.0—25.1	
	Δα	Δδ	Δα	Δδ
	s	″	s	″
January	+0.014 22	+0.66 20	+0.062 25	+0.64 24
February	−.007 22	+1.10 22	+.043 19	+.65 20
March	+.013 27	+.45 28	+.051 23	+.55 23
April	+.002 18	+.34 20	+.023 22	+.36 22
May	−.003 22	+.45 23	+.011 34	+.63 35
June	+.011 26	+.34 25	+.011 25	+.29 25
July	+.017 15	+.16 15	−.022 27	−.03 27
August	+.044 19	−.13 24	+.037 27	−.12 27
September	+.044 29	−.52 28	+.037 25	+.06 26
October	+.053 40	+.10 41	+.050 32	−.20 32
November	+.062 29	+.32 30	+.061 26	+.22 27
December	+.056 15	+.41 15	+.083 15	−.06 15
Mean	+.028 284	+.28 291	+.035 300	+.24 303

The declination residuals were solved in the form:

$$\Delta\delta = -\Delta\delta_{,,} + \sin\alpha\,\Delta\epsilon + \cos\alpha\,\sin\epsilon\,\Delta E.$$

giving:

Sun	$\Delta\delta_{,,}$	$\Delta\epsilon$	ΔE
	″	″	″
1918-22	−0.31	−0.18	+1.04
1922-25	−.25	−.03	+.91

The corrections $\Delta\epsilon$ and ΔE were introduced into the equations for $\Delta\alpha$,

$$\Delta\alpha = -\Delta\alpha_o + \cos\epsilon \sec^2\delta \Delta E - \cos\alpha \tan\delta \Delta\epsilon$$
$$+2 \sin\alpha \sec\delta \Delta h - 2 \cos\alpha \cos\epsilon \sec\delta \Delta k$$

and the resulting right ascension residuals gave:

Sun	$\Delta\alpha_o$	Δh	Δk	Δe	$\Delta\pi$
	s	″	″	″	″
1918–22	+0. 034	−0. 10	+0. 21	−0. 23	− 2. 6
1922–25	+ . 015	− . 24	+ . 01	− . 06	−13. 5

The corrections to the corrected tabular places of the Moon using the observations as finally corrected for all corrections except that for equinox were solved for corrections to equinox and equator the same as was done for the Sun observations, except that no further corrections to the Moon's elements were considered. The declinations 1923–1925 were further corrected for the latitude correction −0″.50, as had been done for the earlier years. The residuals were divided into three epochs corresponding to fluctuations in longitude, change in tables, and to the two positions of the circle.

Moon (Obs.— Tab.)

R. A.	1913.6—18.6				1918.7—23.0				1923.0—25.1			
	$\Delta\alpha$		$\Delta\delta$		$\Delta\alpha$		$\Delta\delta$		$\Delta\alpha$		$\Delta\delta$	
h h	s		″		s		″		s		″	
23–0	−0. 084	32	+0. 37	28	−0. 005	32	+0. 14	30	−0. 053	17	+0. 39	13
1–2	. 080	34	− . 16	32	− . 059	27	+ . 01	28	− . 051	19	+ . 14	23
3–4	- . 011	27	− . 24	30	− . 010	27	− . 14	24	− . 047	22	− . 50	25
5–6	+ . 075	17	+ . 24	25	+ . 020	21	− . 18	29	− . 001	17	− . 51	16
7 8	+ . 051	35	− . 08	36	− . 056	20	− . 04	17	− . 058	8	+ . 15	18
9–10	+ . 022	34	+ . 13	35	− . 053	20	+ . 54	22	− . 043	19	− . 17	17
11–12	− . 012	31	− . 18	30	− . 065	20	− . 29	24	− . 048	12	− . 15	12
13–14	− . 057	25	. 00	21	− . 017	23	− . 67	26	− . 065	12	+ . 20	11
15–16	− . 052	19	− . 40	21	− . 028	30	− . 31	31	− . 092	7	− . 08	7
17–18	− . 003	19	− . 75	19	+ . 033	19	+ . 04	34	− . 043	12	+ . 53	15
19–20	- . 002	25	+ . 17	18	+ . 066	32	+ . 28	42	+ . 013	30	− . 26	15
21–22	− . 022	35	+ . 25	31	− . 036	26	− . 36	30	− . 052	20	+ . 02	16
Mean	− . 017	333	− . 05	326	− . 015	297	− . 08	337	− . 038	195	− . 02	188

These were solved in the form:

$$\Delta\delta = -\Delta\delta_o + \sin\alpha \ \Delta\epsilon + \cos\alpha \ \sin\epsilon \ \Delta M$$
$$\Delta\alpha = -\Delta\alpha_o + \Delta M$$

giving:

Moon	$\Delta\delta_o$	$\Delta\epsilon$	ΔM	$\Delta\alpha_o$
	″	″	″	s
1913.6—18.6	+0. 05	+0. 13	+0. 29	+0. 036
1918.7—23.0	+ . 08	+ . 08	+ . 20	+ . 028
1923.0—25.1	+ . 02	− . 20	+ . 10	+ . 045

It has been shown in *Astr. Jour.* No. 964 that transit circle observations of the Moon require appreciable corrections for irregularities of the surface at the Moon's limbs, and that those in right ascension vary with the right ascension. By applying approximate corrections for surface to the above observations the equinox correction came out $0^{s}.005$ smaller.

The corrections to the Ephemeris right ascensions and declinations of Mercury, using the observations as finally corrected for all corrections except that for equinox, were transformed into residuals in longitude and latitude and solutions made for corrections to equinox, equator, and orbit elements, using the method employed by HOUGH in discussing the Cape observations, and given in *Annals of the Cape Observatory*, Volume VIII, Parts IV and V. There were some 260 observations of Mercury and the residuals were tabulated as follows, where the arguments Q and E are the heliocentric longitudes of Mercury and the Earth.

Mercury (*Obs. – Eph.*)

Arg.	Arg. E	Arg. Q-E	Arg. Q	Arg. E	Arg. α	Arg. α
	$\Delta\lambda$	$\Delta\lambda$	$\Delta\beta$	$\Delta\beta$	$\Delta\alpha$	$\Delta\delta$
° °	''	''	''	''	s	''
0 to 30	+0. 01		−0. 19	−0. 24	+0. 058	+0. 38
30 to 60	− . 06	+0. 35	− . 29	− . 44	+ . 046	+ . 36
60 to 90	+ . 26	+1. 24	+ . 25	− . 31	+ . 038	+ . 14
90 to 120	− . 02	+1. 13	+ . 25	− . 25	+ . 046	− . 13
120 to 150	− . 01	+1. 15	+ . 44	− . 05	+ . 064	− . 52
150 to 180	+ . 27	+1. 86	+ . 29	− . 10	+ . 066	− . 74
180 to 210	+ . 21	+1. 93	− . 14	− . 07	+ . 065	− . 56
210 to 240	+ . 15	+1. 85	− . 51	+ . 02	+ . 064	− . 76
240 to 270	− . 52	+1. 35	− . 51	− . 10	+ . 068	− . 76
270 to 300	− . 04	+ . 25	− . 75	− . 16	+ . 084	− . 28
300 to 330	− . 07	− . 37	− . 49	− . 26	+ . 088	+ . 05
330 to 360	− . 12		− . 29	− . 43	+ . 076	+ . 28

The analysis of the above residuals gave:

$$\Delta\lambda = +0''.923 - 0''.941 \cos(Q-E) + 0''.108 \sin E - 0''.109 \cos E$$
$$\Delta\beta = -0''.168 - 0''.161 \cos Q \qquad +0''.479 \sin Q - 0''.163 \cos E - 0''.063 \sin E$$

There is little discontinuity in passing through conjunction and no term for semidiameter was used. The first two terms in $\Delta\lambda$ were taken out before the other two terms were determined. The coefficients in the above expressions were equated to the coefficients for similar terms expressed in terms of corrections to the elements and reference coordinates as given by Professor HOUGH. The corrections to the solar elements entering into the equations were taken from the solutions for the Sun given above. The resulting corrections to equinox, equator, and obliquity are

$$\Delta\alpha_0 = +0^{s}.012, \qquad \Delta\delta_0 = +0''.17, \qquad \Delta\epsilon = -0''.16$$

and the corrections to Mercury's elements are

$$\Delta Q = +3''.39, \qquad \Delta e = -0''.56, \qquad \Delta\pi = +0''.7, \qquad \Delta i = +1''.10, \qquad \Delta\Omega = -0''.7$$

These with similar results from earlier series of observations of Mercury made on this instrument have been given in *Astr. Jour.* No. 936.

As seen from the Earth, Mercury moves along the ecliptic approximately with the Sun, and the residuals, $\Delta\alpha$, $\Delta\delta$, above, gave

$$\Delta\delta = -0.''21 + 0.''23 \sin\alpha + 0.''55 \cos\alpha$$
$$\Delta\alpha_o = +0.^s092 - 0.^s064 = +0.^s028$$

The observations of Venus were too few and too poorly spaced for similar analysis.

The only outer planet well spaced around its orbit in these observations was Jupiter, which was observed at 11 out of 12 oppositions of a period. The mean corrections to the Ephemeris right ascension and declination, using the observations as finally corrected for all corrections except that for equinox, were formed for each opposition as tabulated below.

Jupiter (Obs.—Eph.)

Opposition	α	δ	$\Delta\alpha$	$\Delta\delta$
	h	°	s	″
1914. 6	21. 4	−17	−0. 010	+0. 56
1915. 7	23. 6	− 4	− . 015	+ . 35
1916. 8	2. 0	+11	− . 006	+ . 17
1919. 0	6. 6	+23	− . 021	− . 21
1920. 1	9. 1	+18	− . 007	− . 66
1921. 1	11. 1	+ 7	− . 018	− . 52
1922. 2	12. 9	− 4	+ . 014	− . 33
1923. 3	14. 8	−15	− . 002	− . 22
1924. 4	16. 9	−22	− . 006	− . 15
1925. 4	19. 5	−22	− . 036	. 00

Neglecting errors in the elements of Jupiter, the residuals $\Delta\alpha$, $\Delta\delta$, were solved in the form:

$$\Delta\delta = -\Delta\delta_0 + \sin\alpha\,\Delta\epsilon + \cos\alpha\,\sin\epsilon\,\Delta J$$
$$\Delta\alpha = -\Delta\alpha_0 - .24\Delta E \qquad + \qquad \Delta J$$

giving:

$$\Delta\delta_0 = +0.''08, \qquad \Delta\epsilon = -0.''14, \qquad \Delta J = +1.''06, \qquad \Delta\alpha_0 = +0.^s065$$

The solution is only approximate. Jupiter was observed near opposition and the error of the Earth's position enters, especially in the longitude. The $\Delta\alpha_0$ has not been used.

The results from the various solutions just given are collected below, where $\Delta\epsilon$ is the correction to the obliquity, $\Delta\delta_0$ is the correction to the declinations at the equator, and $\Delta\alpha_0$ is the correction to the right ascensions. The accidental errors of observations are of the same order for these objects. The day conditions and day terms are not so well known for the Sun and Mercury, and they were observed in only part of the work and one position of the circle. The tabular positions of the Moon on the other hand are not so well known. Means have therefore been taken roughly in proportion to the number of observations.

Final Corrections for Equinox, Equator and Obliquity, 1913–1925

Object	$\Delta\alpha_0$	$\Delta\delta_0$	$\Delta\epsilon$	No. Obs.
	s	"	"	
Sun.............1918.6−22.0	+0.034	−0.31	−0.18	284
1922.0−25.1	+ .015	− .25	− .03	300
Moon...........1913.6−18.6	+ .036	+ .05	+ .13	330
1918.6−23.0	+ .028	+ .08	+ .08	330
1923.0−25.1	+ .045	+ .02	− .20	190
Mercury........1918.6−25.1	+ .020	+ .19	.00	250
Jupiter..........1913.6−25.5	(+ .065)	+ .08	− .14	150
Venus...........1918.6−25.1		+ .20		120
Mars............1913.6−25.1		+ .06		90
Adopted mean............	+ .030	.00	− .04	......

This correction for equinox, making the right ascension $+0^s.03$ on EICHELBERGER and $-0^s.02$ on NEWCOMB, was applied as explained on page 41. The above results show that no correction is needed to the final declination system at the equator.

FORMATION OF THE STAR CATALOGUE

The individual results of observations of the stars are not published. They are on record and available in manuscript form.

Only direct observations made at night were included in the formation of the catalogue. Except a few observations of azimuth stars no right ascensions were included unless four or more clock stars were observed at the same time. Nearly all the stars were observed four times, once in each clamp in each of the two positions of the circle. A few were observed but three times; the circumpolars from eight to twelve times; and the clock and azimuth stars may be recognized by their large number of observations.

The probable errors of the catalogue positions, pages 161–330, which in general result from four observations, may be taken as one-half those for single observations as given on page 41 for the right ascensions, and page 61 for the declinations.

The miscellaneous stars, pages 331–342, have ordinal numbers continuous with those in the main catalogue, and have the same form of page. Many of these were observed four times. They include 86 latitude stars of the photographic zenith tube list; also they include the two intermediaries C. D.–23° 222 and C. D.–29° 11071 which were very faint and not sufficiently observed. A third, C. D.–27° 1065, was too faint for observation with this instrument.

The mean equinox and equator 1920 was chosen because it was near the mean epoch of observation, 1919, and as proper motions for a considerable part of the stars were unknown, in forming the catalogue the observations were reduced to 1920 without proper motions. The errors in the resulting positions, and corresponding precession computations, due to proper motions from epoch to equinox are very small. This seems highly desirable in observational catalogues intended for general use. On pages 343–365 the standard stars are also given reduced with proper motion to 1925.0.

CIRCUMPOLAR OBSERVATIONS

For the 198 standard stars within 24° of the pole observed at both culminations, the catalogue right ascensions and declinations are the weighted means of the above and below pole observations, each observation below pole having a weight decreasing with zenith distance according to the following:

Weights for Below Pole Observations

Decl.	Wt.	Decl.	Wt.
° °		° °	
+90 to +85	1.0	+77 to +71	0.7
+84 to +78	0.8	+70 to +66	0.5

The differences, above pole minus below pole, in each coordinate, arranged according to declination, are given in the following table, together with the identifying catalogue numbers of the star and the numbers of observations above and below pole in each coordinate.

Circumpolar Observations (Above Minus Below)

Star Cat. No.	Decl.	Δα	Δα cos δ	Δδ	No. Obs.		Star Cat. No.	Decl.	Δα	Δα cos δ	Δδ	No. Obs.	
					Above	Below						Above	Below
	° ′	s	s	″				° ′	s	s	″		
7875	89 1	−0.25	−0.004	−0.34	55, 50	50, 49	4148	84 18	−0.11	−0.011	+0.11	4, 4	4, 4
654	88 53	+ .12	+ .002	+ .19	131, 157	135, 121	3341	84 18	− .19	− .019	+ .01	4, 4	5, 5
3479	88 52	− .23	− .005	− .10	60, 58	62, 60	9543	83 55	+ .50	+ .053	− .20	4, 4	4, 4
436	88 36	− .26	− .006	− .44	4, 4	4, 4	5335	83 51	− .25	− .027	− .10	4, 4	4, 4
5092	88 9	+ .10	+ .003	+ .09	53, 51	51, 49	5336	83 51	− .01	− .001	− .10	54, 42	51, 40
6246	87 32	− .01	.000	− .01	59, 54	59, 54	1745	83 37	− .08	− .009	+ .02	4, 4	4, 4
2957	87 11	− .06	− .003	− .02	91, 59	98, 67	8565	83 21	− .28	− .032	− .39	4, 4	4, 4
7468	87 0	− .30	− .015	− .38	4, 4	4, 4	8059	83 19	+ .26	+ .030	− .16	4, 4	4, 4
9772	86 52	+ .03	+ .002	+ .10	66, 46	61, 47	6590	83 11	+ .13	+ .015	+ .10	4, 4	4, 4
2638	86 45	− .18	− .010	− .18	5, 5	4, 4	875	83 11	+ .18	+ .021	+ .01	5, 5	4, 4
8837	86 42	− .20	− .012	+ .24	4, 4	4, 4	5708	83 9	− .14	− .017	+ .36	4, 4	4, 4
7456	86 37	.00	.000	− .15	122, 93	124, 91	7702	83 7	+ .04	+ .005	+ .32	5, 5	4, 4
1543	86 24	+ .03	+ .002	+ .56	4, 4	4, 4	4330	82 58	− .01	− .001	+ .06	88, 65	88, 71
4625	86 4	+ .07	+ .005	+ .15	4, 4	4, 4	6207	82 50	− .11	− .014	− .25	4, 4	4, 4
4999	86 2	− .28	− .019	+ .29	4, 4	5, 5	9936	82 45	− .13	− .010	+ .20	4, 4	4, 4
2124	85 51	+ .30	+ .022	+ .14	4, 4	4, 4	9495	82 44	− .05	− .006	+ .48	4, 4	4, 4
416	85 50	− .07	− .005	− .02	58, 48	62, 47	3419	82 41	.00	.000	+ .01	5, 5	4, 4
9294	85 42	+ .15	+ .011	+ .53	4, 4	4, 4	3031	82 34	− .05	− .006	− .25	85, 60	86, 76
2219	85 37	+ .23	+ .017	+ .33	4, 4	4, 5	3566	82 32	+ .04	+ .005	+ .49	4, 4	4, 4
1755	85 21	.00	.000	− .15	77, 68	78, 71	7899	82 15	+ .04	+ .005	+ .37	4, 4	4, 4
2363	85 10	+ .05	+ .004	− .21	109, 96	113, 97	8652	82 14	+ .08	+ .011	+ .02	103, 87	83, 70
4308	84 40	+ .27	+ .025	+ .02	4, 4	4, 4	2716	82 11	− .09	− .012	− .25	4, 4	5, 5
1357	84 38	− .06	− .006	− .26	4, 4	4, 4	4616	82 10	.00	.000	+ .38	4, 4	4, 4
3757	84 30	+ .13	+ .012	− .20	4, 4	4, 4	7024	82 10	− .03	− .004	− .09	154, 113	150, 121
8380	84 26	− .08	− .008	+ .34	4, 4	6, 6	247	82 3	− .01	− .001	+ .40	4, 4	4, 4

Circumpolar Observations (Above Minus Below)—Continued

Star Cat. No.	Decl.	Δα	Δα cos δ	Δδ	No. Obs.		Star Cat. No.	Decl.	Δα	Δα cos δ	Δδ	No. Obs.	
					Above	Below						Above	Below
	° ′	s	s	″				° ′	s	s	″		
3943	81 41	0.00	0.000	+0.02	121, 82	138, 103	1926	76 28	−0.08	−0.019	+0.03	5, 5	4, 4
4774	81 34	+ .11	+ .016	− .05	4, 4	4, 4	8050	76 24	− .12	− .028	+ .11	4, 4	4, 4
6033	81 10	+ .05	+ .008	+ .28	4, 4	5, 5	4376	76 8	.00	.000	− .19	5, 5	4, 4
8537	81 9	− .02	− .003	− .11	4, 4	4, 4	6731	76 5	− .07	− .017	+ .50	4, 4	6, 6
1102	81 7	+ .15	+ .023	− .48	5, 5	4, 4	6005	76 3	− .07	− .017	+ .33	4, 4	5, 5
2001	81 4	.00	.000	− .23	4, 4	4, 4	3420	76 0	.00	.000	+ .56	5, 5	4, 4
5288	81 4	+ .04	+ .006	− .13	4, 4	4, 4	6779	75 56	− .06	− .015	− .14	4, 4	5, 5
6470	81 2	− .04	− .006	+ .36	4, 4	4, 4	5382	75 54	− .04	− .010	− .03	4, 4	5, 5
5489	80 54	− .02	− .003	+ .04	4, 4	4, 4	9371	75 49	+ .05	+ .012	+ .09	4, 4	4, 4
4428	80 51	+ .05	+ .008	− .22	4, 4	5, 5	1948	75 48	− .18	− .044	− .17	4, 4	4, 4
763	80 31	− .04	− .007	− .37	4, 4	4, 4	2486	75 35	− .01	− .002	+ .13	4, 3	5, 5
7390	80 19	− .08	− .013	+ .28	4, 4	4, 4	7031	75 31	− .11	− .028	+1.00	4, 4	4, 4
8670	80 15	+ .05	+ .008	− .45	4, 4	4, 4	6747	75 25	+ .02	+ .005	− .31	4, 4	4, 4
7236	80 13	+ .11	+ .019	+ .62	4, 4	4, 4	7807	75 20	− .07	− .018	+ .10	4, 4	4, 4
7508	80 0	+ .13	+ .023	+ .77	4, 4	6, 6	747	75 12	− .02	− .005	− .02	5, 5	4, 4
7509	80 0	+ .07	+ .012	+ .12	4, 4	6, 6	2311	75 0	+ .05	+ .013	− .40	4, 4	5, 5
6904	79 57	+ .08	+ .014	− .69	4, 4	5, 5	9611	74 57	− .08	− .021	+ .24	4, 4	4, 4
2745	79 39	+ .04	+ .007	+ .05	5, 4	5, 5	8531	74 41	− .03	− .008	− .04	5, 5	4, 4
8068	79 27	− .04	− .007	− .25	4, 4	4, 4	291	74 33	+ .18	+ .048	+ .16	4, 4	4, 4
4234	79 21	− .05	− .009	− .17	4, 4	4, 4	6172	74 29	+ .12	+ .032	− .14	4, 4	4, 4
472	79 15	+ .08	+ .015	+ .05	4, 4	4, 4	3842	74 21	− .03	− .008	+ .20	4, 4	4, 4
9101	79 10	+ .07	+ .013	− .03	4, 4	4, 4	3288	74 8	.00	.000	− .08	4, 4	4, 4
8583	79 9	− .08	− .015	− .03	4, 4	4, 4	9925	73 58	+ .02	+ .006	+ .46	4, 4	4, 4
2166	79 9	+ .15	+ .028	− .10	5, 5	4, 4	3563	73 55	+ .12	+ .033	− .11	4, 4	4, 4
1237	79 6	.00	.000	+ .22	4, 4	4, 4	2117	73 51	+ .06	+ .017	+ .63	4, 4	4, 4
3073	78 51	+ .05	+ .010	+ .57	5, 5	5, 5	1663	73 47	+ .02	+ .006	− .05	4, 4	4, 4
3681	78 27	− .06	− .012	− .64	5, 5	4, 4	9827	73 34	+ .14	+ .040	− .47	4, 4	4, 4
4545	78 12	+ .02	+ .004	+ .23	4, 4	4, 4	9090	73 19	− .07	− .020	− .11	4, 3	4, 4
5051	78 4	− .04	− .008	− .01	4, 4	5, 5	4118	73 16	− .03	− .009	− .62	4, 4	4, 4
6556	78 2	+ .21	+ .043	− .19	5, 5	5, 5	9392	73 14	+ .04	+ .012	− .16	4, 4	4, 4
4816	78 2	− .19	− .039	− .14	4, 4	4, 4	5482	73 13	− .11	− .032	− .34	4, 4	5, 5
5874	77 55	+ .01	+ .002	− .13	5, 5	4, 4	8007	73 12	+ .04	+ .012	+ .16	4, 4	4, 4
8778	77 48	+ .07	+ .015	+ .42	4, 4	4, 4	5073	73 0	− .04	− .012	+ .34	5, 5	4, 4
6462	77 37	− .19	− .041	+ .46	4, 4	4, 4	5568	72 48	+ .01	+ .003	− .24	4, 4	4, 4
6885	77 36	+ .07	+ .015	+ .21	5, 5	4, 4	9136	72 48	+ .06	+ .018	+ .32	4, 4	4, 4
668	77 34	− .02	− .004	+ .33	4, 4	4, 4	7618	72 42	− .05	− .015	+ .38	6, 6	4, 4
7696	77 29	+ .13	+ .028	+ .33	4, 4	4, 4	3432	72 39	+ .07	+ .021	− .25	4, 4	4, 4
8384	77 28	− .04	− .009	− .23	4, 4	4, 4	659	72 38	.00	.000	+ .51	4, 4	4, 4
1339	77 27	.00	.000	− .10	4, 4	4, 4	1062	72 28	− .02	− .006	+ .09	4, 5	5, 5
9777	77 23	+ .01	+ .002	− .25	4, 4	4, 4	4608	72 24	− .04	− .012	− .32	4, 4	4, 4
5002	77 21	.00	.000	+ .36	4, 4	5, 5	1199	72 21	+ .11	+ .033	+ .22	4, 4	4, 4
9828	77 11	− .04	− .009	+ .31	4, 4	4, 4	8521	72 16	+ .08	+ .024	− .52	4, 4	5, 5
2856	77 5	− .05	− .011	− .15	4, 4	4, 4	7354	72 11	+ .05	+ .015	− .25	4, 4	4, 4
7417	76 58	− .04	− .009	− .51	4, 4	4, 4	6373	72 7	+ .06	+ .018	+ .21	4, 4	5, 5
85	76 30	+ .06	+ .014	− .11	5, 5	4, 4	6234	72 5	+ .01	+ .003	+ .16	4, 4	4, 4

Circumpolar Observations (Above Minus Below)—Continued

Star Cat. No.	Decl.	Δα	Δα cos δ	Δδ	No. Obs.		Star Cat. No.	Decl.	Δα	Δα cos δ	Δδ	No. Obs.	
					Above	Below						Above	Below
	° ′	s	s	″				° ′	s	s	″		
824	72 2	−0.05	−0.015	+0.57	4, 4	4, 4	7316	68 48	+0.03	+0.011	−0.63	4, 4	8, 8
2966	71 57	+ .01	+ .003	+ .06	4, 4	4, 4	4637	68 43	− .01	− .004	− .16	4, 4	8, 8
9213	71 57	− .02	− .006	+ .04	4, 4	4, 4	3387	68 43	+ .04	+ .015	− .32	4, 4	8, 8
7179	71 53	− .02	− .006	+ .43	4, 4	4, 4	3084	68 38	− .01	− .004	+ .03	4, 4	10, 10
5646	71 39	− .04	− .013	+ .14	4, 4	5, 5	785	68 18	+ .04	+ .015	− .16	4, 4	8, 8
4253	71 28	− .03	− .010	+ .08	4, 4	5, 5	7281	68 11	+ .02	+ .007	+ .19	5, 5	8, 7
7616	71 18	− .02	− .006	− .09	5, 5	4, 4	8376	68 2	− .06	− .022	− .14	4, 4	8, 8
7851	71 11	− .03	− .010	− .01	4, 4	4, 4	6686	68 1	− .06	− .022	− .10	4, 4	8, 8
1551	71 5	.00	.000	+ .22	5, 5	4, 4	3728	67 57	+ .05	+ .019	− .79	4, 4	8, 8
9010	70 57	− .03	− .010	+ .66	4, 4	9, 9	8730	67 51	− .01	− .004	− .19	4, 4	8, 8
8102	70 49	+ .01	+ .003	+ .10	4, 4	8, 8	7686	67 43	− .02	− .008	+ .11	4, 4	8, 7
2656	70 35	+ .01	+ .003	+ .24	4, 4	8, 8	577	67 43	− .02	− .008	− .14	4, 4	8, 8
5205	70 14	− .04	− .014	+ .27	5, 5	9, 9	9680	67 40	+ .04	+ .015	+ .45	5, 5	8, 8
8925	70 13	+ .04	+ .014	+ .03	4, 4	8, 8	6326	67 39	+ .08	+ .030	− .19	4, 4	9, 9
3954	70 11	− .02	− .007	+ .26	4, 3	8, 8	3992	67 38	+ .01	+ .004	− .27	4, 4	8, 8
2231	70 9	+ .05	+ .017	+ .49	4, 4	8, 8	686	67 38	− .01	− .004	− .70	4, 4	8, 8
8225	70 4	− .02	− .007	− .06	4, 4	8, 8	9506	67 34	+ .05	+ .019	+ .51	4, 4	8, 8
612	69 51	− .01	− .003	− .32	4, 4	8, 8	7971	67 31	− .23	− .088	− .44	4, 4	8, 8
5886	69 48	+ .07	+ .024	− .23	4, 4	8, 8	1114	67 29	+ .01	+ .004	− .04	4, 4	8, 8
4778	69 46	+ .02	+ .007	+ .31	4, 4	9, 9	3787	67 28	− .05	− .019	−1.26	4, 4	8, 9
4006	69 36	− .01	− .003	+ .15	4, 4	8, 8	2146	67 23	− .04	− .015	+ .13	4, 4	8, 8
4439	69 30	+ .03	+ .011	+ .20	4, 4	8, 8	9882	67 22	+ .01	+ .004	− .25	4, 4	8, 8
2591	69 21	− .05	− .018	− .05	4, 4	10, 10	4856	67 11	− .03	− .012	+ .27	4, 4	8, 8
1139	69 18	− .05	− .018	+ .11	5, 5	4, 4	9794	67 3	+ .05	+ .020	− .23	4, 4	7, 7
6329	69 14	− .06	− .021	− .63	4, 4	8, 8	1004	67 3	+ .04	+ .016	− .68	4, 4	8, 8
1828	69 12	− .04	− .014	− .12	4, 4	9, 9	1526	66 57	− .03	− .012	+ .63	4, 4	8, 8
2834	68 59	+ .06	+ .021	− .29	4, 4	8, 8	6212	66 15	.00	.000	+ .11	4, 4	8, 8
6847	68 56	− .04	− .014	+ .56	4, 4	9, 8	2006	66 13	.00	.000	+ .20	4, 4	8, 8
405	68 56	− .01	− .004	+ .08	4, 4	8, 8	903	66 9	− .08	− .032	− .25	4, 4	8, 8

REDUCTIONS TO 1920.0

Reductions from apparent to mean place were made using the Independent Star Numbers and the apparent observed right ascension and declination. The computations were made in duplicate, and with 4-place tables. The short-period terms were included and above 86° declination second-order terms were included. No proper motions were used. The reductions from mean place for beginning of year of observation to mean equinox and equator 1920.0 were made using precessions and secular variations taken from recently published catalogues, such precessions always being reduced to NEWCOMB's constants. After the catalogue places had been formed and the final precessions and secular variations were computed, the provisional reductions to 1920.0 were rechecked, and when necessary revised. When a corresponding change in the 1920.0 position required it a recomputation of the final precession was also made. For stars whose apparent places were given in the American Ephemeris the reductions from apparent place to 1920.0, freed from proper motion, were taken from the Ephemeris.

Below are given the annual parallaxes larger than 0″.12. For the first six of these, corrections were applied in reductions from apparent places.

Annual Parallaxes Exceeding 0″.12

Cat. No.	Par.	Cat. No.	Par.	Cat. No.	Par.	Cat. No.	Par.
	″		″		″		″
2810	0. 38	1762	0. 20	317	0. 15	5465	0. 13
3176	. 33	7478	. 19	9636	. 15	5506	. 13
1467	. 32	318	. 18	2394	. 15	451	. 13
715	. 31	7132	. 18	1071	. 14	2002	. 12
8749	. 30	6182	. 16	4683	. 14	7699	. 12
8218	. 23	6150	. 16	1535	. 14	9531	. 12

RIGHT ASCENSIONS AND DECLINATIONS

The right ascensions include besides the usual reductions for instrumental constants, pivots, clock corrections, and reductions to 1920.0, the corrections for personal equation (p. 32) and the correction for equinox (p. 40). They are given to $0^s.001$ south of +60°, and to $0^s.01$ from +60° to +90°. They were reduced as an independent system and, at the equator, are $0^s.016$ less than NEWCOMB's right ascensions.

The declinations include besides the usual reductions for instrumental constants, latitude, refraction, and reduction to 1920.0, the corrections for division errors (p. 42), flexure (p. 46), variation of latitude (p. 44), clamp difference (p. 50), and corrections to the provisional latitude, refraction, and flexure (p. 53). No further correction for equator point was necessary. They form an independent system and at the equator are 0″.07 north of NEWCOMB's declinations.

PRECESSIONS AND SECULAR VARIATIONS

The precessions given in the catalogue are based on NEWCOMB's constants for 1920.0. The final right ascensions and declinations of the catalogue were used in the computations, and these were made with a calculating machine, using natural numbers taken from "Precession Tables," 1925, by SCHORR (Hamburg), with reductions for difference in epoch. For stars south of +60° declination the secular variations were taken from the Greenwich Tables, 1910 (DAVIDSON). For stars north of +60° declination the computations were made using SCHORR's Tables.

THE PROPER MOTIONS

In order to render the catalogue more generally useful proper motions have been given for all the stars. For all the brighter stars and for part of the fainter stars proper motions were found already available, and they were taken from catalogues of more recent epochs as follows: For the standard stars, not in Boss, from Greenwich 1925, or Cape II, 1900; for the intermediary stars, +90° to +64°, from Greenwich 1900; +55° to +50° from Yale 1916; +40° to +35° from Lund 1925; +35° to +32° from Berlin B. 1920; +32° to +24° from Greenwich 1910; and +5° to −5° from Nice 1925. For others the more definitive proper motions from Boss, Cincinnati, Groombridge, and others, were taken as collected by SCHORR in his "Proper Motion Lexicon." The Yale zone +55° to +60° was received after the computations here, but they were compared for a check. For 60 stars, +90° to +64°, not assigned a proper motion in Greenwich, one was computed using three normal places; W 1920 and Bonn 1925, about 1919; Gr. T. C. and Astr. about 1900; and the A. G. about 1875. For 95 zenith stars, +38° 45′ to +39° 5′, definitive motions were also determined using all old observations, and in doing this the very accurate relative declinations of these stars were used as given by 60 to 70 observations of each star on the photographic zenith tube plates for the mean epoch 1930.

For 1,550 stars, −10° to −30°, definitive determinations were made as follows:

For the stars in the Harvard zone, −10° to −14°, a few positions around 1900, positions from the Albany Catalogue 1910, a plate-proof copy of which was kindly furnished by the Carnegie Institution in advance of publication, and the present positions, were included with all the old observations as brought up to 1900 in Harvard Annals No. 77, giving in many cases an interval of 100 years or more. Systematic corrections were applied to reduce the catalogues to the Boss system. Normals formed every 20 or 30 years were plotted, with their weights, and the centennial motions were scaled off by superposing a straight line etched on transparent celluloid. The scaling was duplicated independently by a second computer. The extension of the plots by 20 to 25 years to include the present positions improved the proper motions given in Harvard, and gave many in addition.

For the stars in the Washington, Algiers, and Cordova zones, −14° to −30°, comparisons were also made with the old catalogues, systematic corrections being applied to reduce such catalogues to the fundamental system. A large portion of the stars −15° to −20° were in the Bordeaux catalogue, 1890, and the individual comparisons with the Bonn and Munich observations around 1850 were used as given in Bordeaux, except for systematic corrections. Some of the stars were in Piazzi and Bessel and many were in Lalande, but more generally a first normal was formed around 1850, including the Washington and Bonn zones. Other normals were formed around 1875, 1895, and 1920. These were also plotted and the motions scaled off. In much of this work the individual positions rather than the normals were plotted. Motions were also worked out for various other stars in the catalogue.

For stars not in the above lists, and for the zones +64° to +55°, +50° to +40°, +24° to +5°, and −5° to −30° systematic comparisons were made with the catalogues of the Astronomische Gesellschaft and Bonn, 1900. Such catalogues were corrected systematically to bring them to the Boss system, and were brought up to 1920 using the precessions of those catalogues corrected for the differences between NEWCOMB's and STRUVE-PETERS' precessions from epoch of observation to 1920. The southern catalogues were observed only some 20 to 30 years earlier than the present series, but the want of proper motions for the fainter stars seemed to warrant this provisional determination from limited intervals. Proper motions were thus determined for over 6,200 stars, 1,100 of which were already known and were used in examination for systematic differences between the computed values and the Boss system as indicated in the table below. The motions computed in this way, and also those taken from other sources which depended upon the differences of but two or three catalogues, and were less definitive, are distinguished in the catalogue by being given to 0^{s}001 and 0$''$01.

Proper Motions, Computed (W_{20}—A.G.) Minus Boss

R. A.	Hels. +55° +64°	Bonn +40° +50°	Berl. +20° +25°	Berl. +15° +20°	Leip. +10° +15°	Leip. + 5° +10°	Stbr. −6° −2°	Vien −10° − 6°	Cmbr. −14° −10°	Wash. −18° −14°	Alg. −22° −18°	Cord. −30° −22°
$\Delta\mu$ (Unit 0^{s}0001)												
h h												
0– 3	− 9	−14	− 4	+ 5	− 6	− 4	− 5	+ 6	+12	+ 9	+17	+ 4
3– 6	−10	− 8	− 5	0	−11	−10	− 7	−11	−12	+ 5	− 5	+ 2
6– 9	−16	− 1	− 7	− 3	−11	−10	−15	0	−10	− 9	− 3	+ 2
9–12	−13	− 4	− 4	+ 7	−21	− 6	+ 1	− 2	− 7	−23	+ 6	+ 8
12–15	− 4	− 9	− 9	−10	− 7	− 7	− 9	− 2	+10	− 5	− 9	0
15–18	−14	− 6	− 6	− 7	−15	− 6	+ 7	+ 2	+10	− 6	+ 6	+ 1
18–21	−15	−16	−11	−12	−10	− 6	+ 4	+ 8	− 1	+ 9	+23	+10
21–24	−19	− 8	− 7	− 6	−10	− 6	+ 3	+ 6	+14	+ 2	+ 5	+18
Mean	−12	− 8	− 6	− 5	−11	− 7	− 3	+ 1	+ 1	− 2	+ 4	+ 6
$\Delta\mu'$ (Unit 0$''$001)												
h h												
0– 3	− 3	+ 1	+ 5	+ 1	+12	+ 3	− 9	+11	+ 9	+ 7	+ 9	0
3– 6	−10	+ 1	+16	+ 3	+11	+ 4	+ 3	+14	+ 4	0	+ 8	− 8
6– 9	+ 4	0	+ 8	+ 3	+ 7	+ 6	−18	− 6	− 3	+ 4	+10	+ 4
9–12	− 2	− 1	+18	+ 8	+18	+10	+ 4	+ 8	+10	+ 3	+ 1	− 6
12–15	− 4	+ 7	+11	+12	+19	+12	+16	+32	+13	+ 2	+ 5	0
15–18	− 2	+ 6	+13	+21	+23	+14	+10	+ 7	+22	+ 9	+11	+ 7
18–21	+ 8	+ 9	+ 2	+11	+20	+10	+14	0	− 4	0	− 9	− 4
21–24	− 2	+ 3	+16	+16	+16	+13	+ 1	+10	+ 9	+11	+ 1	− 8
Mean	− 1	+ 3	+11	+ 9	+15	+ 9	+ 3	+11	+ 7	+ 4	+ 5	− 2
No. compared	146	235	80	71	75	80	63	54	49	69	82	175
No. computed	630	820	480	470	410	460	400	400	380	400	450	720
Years	44	43	37	48	45	33	28	25	28	23	28	24
Prob. Er. μ	±20	±16	± 7	± 8	± 8	± 9	±10	± 8	±14	±16	±15	±14
Prob. Er. μ'	±15	±15	± 9	± 9	±10	±10	±14	±16	±18	±18	±16	±16

To render the proper motions in the catalogue somewhat more homogeneous, and to correct for systematic errors in the Boss system, those in right ascension for the zones +24° to +40°, and +50° to +55°, and for all standard stars north of +40°, should be decreased by 0^{s}.0003; and those in declination for the zones +24°

to +32°, and −5° to +5°, and for all standard stars south of +60°, should be increased by 0″.002.

As the material for proper motion determination for such stars is rapidly accumulating now it seems inadvisable to make statistical studies of this list.

DOUBLE STARS

Where companion stars are so close or so bright that both may have influenced an observed position, or where as for binaries the orbital motion may affect the proper motion, or for clearness in identification, explanation has been made in footnotes to the catalogue. These notes conform to the observers' notes, and to the instruction notes on observing lists, when such were made. An attempt was made to give all components within 5″; most of those within 10″; and bright companions within 30″; also all well-known physical systems. For this purpose the 10,000 stars were systematically compared with the general double star catalogues of BURNHAM, JONCKHEERE, and INNES, with AITKEN'S extension of BURNHAM, and with recent lists, so as to include all known doubles. Altogether notes are given for about 550 stars. A very valuable help in this work, and one much appreciated, was that given by Doctor AITKEN in allowing Lieut. R. P. GLASS, United States Navy, a representative from this Observatory free access to the manuscript copy of his great catalogue.

As in each observation the light was reduced by screening it is considered that when two components differ considerably in magnitude the fainter, if separated, would be screened out and the brighter alone observed. Companions fainter by two magnitudes, and at distances greater than 1″ were supposed screened out. For stars of nearly equal magnitude less than 2″ apart, and in a few cases over 2″ apart, and with no observer's notes, it has been assumed that the mean was observed. For distances less than 1″ the mean is given as referring to center of light; while for wider pairs, which were so taken only if nearly equal in magnitude, the mean refers to the middle point between the two stars. For stars having no observing notes, explanations were often taken from similar stars where observing notes were made. However in some cases there are uncertainties as to what was observed.

When the mean was observed the combined magnitude is given in columns 4 and 5 of the catalogue and a footnote gives the magnitude of each component and their distance and position angle. When one component was observed the magnitude of that component is given in columns 4 and 5 and the footnote gives the magnitude of the other component, its distance, and angle. In most cases it has been possible to give the quite approximate distances and position angles for the epoch 1920. When the photometry gives the magnitude of the mean, as is most usual, the magnitude of a component was deduced from this mean and from the difference in magnitude given either by the Harvard observers or by the double-star observers. The magnitudes in the footnotes are given on the Harvard scale as far as possible.

For 11 well-known systems footnotes give the reduction to center of gravity at epoch. For these stars the coordinates in columns 6 and 10 are for the brighter star, as observed, but the proper motions are for the center of gravity.

MAGNITUDES

The Bonn or Cordoba Durchmusterung magnitudes of all stars were entered on the cards for the use of the observers in identifying the star or field and for indicating the approximate screen to be used. There are over 3,000 stars of the list that have been observed photometrically at the Harvard Observatories, and for over 2,000 of these the correction for absorption, 0.25 mg. (sec $Z-1$), was applied to get the apparent magnitude at Washington as given by the Harvard photometry. The scale value of the screen system described on page 7 was determined by equating the scale reading as recorded for each observation to this Harvard apparent magnitude. Except for a few clock stars, observations within 50° of the zenith were used, and cloudy and hazy nights were not used. The observations taken in twilight, i. e., with the sun from 6° to 18° below the horizon were tabulated separately from the night values; the observations of clock stars were kept separate, and the tabulation was made for each observer. In all, there were over 20,000 observations used in the discussion. A small difference of 0.04 mg. was found between the twilight and night values, mostly in the bright stars, and the twilight observations were corrected by this amount and combined with the others. The differences by observers had but little variation with magnitude and as finally used are

$$\mathrm{M}\ +0.07=\mathrm{P}\ -0.24=\mathrm{S}\ -0.11=\mathrm{Sr}\ -0.06=\mathrm{Bn}\ +0.03=\mathrm{Ry}\ +0.32,$$

that is, for a given reading of the scale by P the stars were 0.24 mg. fainter, and by Ry 0.32 mg. brighter than the means, or for a given magnitude P used more screen and Ry less.

The table below gives the scale reading of the variable screen as used alone and with each of the other screens; the number of observations used and the mean Harvard magnitude of those observations. The fourth, eighth, and twelfth columns give the smoothed values from plotted curves, and these are the scale values, given for the list and clock stars separately, which, as corrected to each observer by the differences given above were used to derive the apparent observed magnitudes for each star.

Scale Value of Screen System

Scr. Div.	No. Obs.	Har. Mg.	Adp. Mg.	Scr. Div.	No. Obs.	Har. Mg.	Adp. Mg.	Scr. Div.	No. Obs.	Har. Mg.	Adp. Mg.
List Stars											
O+ 0				I+ 0	1,148	6.21	6.14	II+ 0	307	4.38	4.38
1				1	27	6.04	6.02	1	------	------	4.25
2				2	119	5.86	5.90	2	32	4.10	4.12
3	77	8.89	8.95	3	214	5.77	5.77	3	44	3.98	4.00
4	99	8.75	8.76	4	269	5.65	5.65	4	45	3.91	3.86
5	161	8.63	8.56	5	319	5.53	5.53	5	56	3.74	3.72
6	150	8.43	8.38	6	283	5.41	5.39	6	37	3.63	3.60
7	224	8.25	8.18	7	246	5.26	5.27	7	39	3.53	3.46
8	286	8.06	7.99	8	244	5.20	5.14	8	51	3.34	3.32
9	261	7.85	7.80	9	181	4.97	5.02	9	24	3.28	3.16
10	424	7.64	7.60	10	167	4.92	4.90	10	28	2.93	2.98
11	408	7.40	7.42	11	102	4.82	4.78	11	15	2.68	2.79
12	539	7.21	7.22	12	54	4.68	4.65	II+12	13	2.54	2.62
13	557	6.97	7.03	13	24	4.46	4.53				
14	474	6.81	6.84	14	12	4.41	4.40				
15	351	6.65	6.64	I+15	10	4.23	4.28				
16	167	6.51	6.45								
17	55	6.29	6.26								
O+18	25	6.02	6.06								
Clock Stars											
I+ 0			5.66	II+ 0	2,638	4.10	4.12	III+ 0	256	1.08	1.10
1			5.54	1	57	3.85	3.99	1	------	------	1.00
2			5.44	2	235	3.82	3.87	2	22	.94	.90
3	115	5.29	5.32	3	430	3.79	3.74	3	23	.72	.80
4	143	5.24	5.21	4	492	3.73	3.62	4	23	.82	.70
5	301	5.14	5.10	5	741	3.56	3.50	5	36	.72	.60
6	306	4.95	4.98	6	548	3.46	3.37	6	32	.43	.50
7	381	4.88	4.87	7	519	3.30	3.24	7	23	.43	.40
8	387	4.74	4.76	8	499	3.18	3.12	8	17	.31	.30
9	262	4.67	4.64	9	393	3.02	2.97	9	7	.12	.20
10	321	4.51	4.54	10	424	2.84	2.82	10	9	.19	.10
11	158	4.50	4.42	11	307	2.61	2.67	III+11			.00
12	115	4.36	4.32	12	250	2.42	2.49				
13	59	4.17	4.20	13	186	2.25	2.34				
14	29	4.04	4.08	14	101	1.97	2.16				
I+15	25	3.99	3.98	15	76	2.03	2.00				
				II+16	30	1.53	1.83				

The difference of some 0.3 mg. in the amount of screen used on the clock stars and on the list stars of the same magnitude was doubtless due to the plan of observing requiring clock stars at each end of the night with a larger percentage of twilight, and to taking clock stars on nights too hazy for lists. It is considered that this difference was less than 0.2 mg. for the mass of the work, and this corresponds to a difference of less than $0^s.002$ in the equinox of the clock and list stars.

As possibly two-thirds of the 10,000 stars of the list were observed with the variable screen alone, its scale is the most important. A curve plotted to scale reading and corresponding magnitude gave about 9.5 mg. for the zero point of this screen, however, at this limiting point the screening became uncertain. Harvard has shown that the Durchmusterung magnitudes at this point are too bright by half a magnitude or more, so that screening really stopped at about 9.5. This is shown independently by these observations in the zero point of the curve.

The magnitudes derived using the scale values as just given were then examined for variation with zenith distance. For the 3,000 stars given in Harvard the observed magnitudes were compared with the Harvard magnitudes and the differences Washington minus Harvard, arranged in groups according to zenith distance as shown in the following table. The second and third columns give the differences and the number of stars used. These residual differences vary as an absorption, 0.20 mg. (sec $Z-1$), but are more probably due to the practice of the observers of using less screen as the seeing becomes worse at larger zenith distances, in order to keep the image plain for the transits. The fourth column gives the usual absorption already used, and the last column gives the total correction, 0.45 mg. (sec $Z-1$), which has been applied to all observed magnitudes at Washington to reduce them to the zenith at any place.

Variation of Observed Magnitudes with Zenith Distance

Z. D.	Obsd. — Phtm.		Absorption	
	Mag.	No.	Applied	Adopted
°	m		m	m
72 S	0. 42	73	0. 56	1. 01
64	. 24	266	. 32	. 58
54	. 15	284	. 18	. 31
44	. 08	293	. 10	. 18
34	. 03	323	. 05	. 09
24	. 01	305	. 02	. 04
14	. 00	308	. 01	. 01
4 S	. 02	294	. 00	. 00
Zenith				
6 N	. 01	288	. 00	. 00
16	. 01	220	. 01	. 02
24	. 01	114	. 02	. 04
31	. 00	125	. 04	. 08
41	. 08	98	. 08	. 14
61	. 28	67	. 27	. 49
71 N	. 42	71	. 52	. 94
(sec $Z-1$)	. 20		. 25	. 45

After the magnitudes had been derived as just explained, differences, observed minus Harvard, and observed minus Dm corrected to the Harvard scale, were taken for the stars fainter than 7.1 mg., and formed into groups arranged according to magnitude and zenith distance. These showed a variation with zenith distance, larger for fainter stars than for brighter stars. Apparently the observers had more difficulty with the fainter stars at larger zenith distances. The few determinations fainter than 8.5 mg., at zenith distances greater than 60° were rejected.

The Harvard comparison which included 1,000 stars showed also a correction to the computed magnitudes as follows:

7.5 to 8.1, +0.1 mg.; 8.2 to 8.6, +0.2 mg.; and 8.7 to 9.2, +0.3 mg.

These were taken as real corrections to the scale value, O+3 to O+10, determined in the first approximation above, and all computed magnitudes were changed to include them.

The final differences, observed minus Dm magnitudes including some 4,000 stars, are:

Mag.	Obs.—Dm.			
	+70° to +20°	+19° to −1°	−2° to −22°	−23° to −30°
	m	m	m	m
7.1 to 8.1	−0. 1	0. 0	−0. 1	0. 0
8.2 to 8.6	0. 0	0. 0	−0. 1	−0. 1
8.7 to 9.5	−0. 1	0. 0	−0. 1	

All discordances as large as one magnitude were examined and magnitudes determined elsewhere were found to substantiate the observed value. The probable error of an observed magnitude is ±0.2 mg. Those at large zenith distances have less weight. As in determining the scale value, so in deriving the final magnitudes, cloudy and hazy nights were avoided and many doubtful records were not used. In uncertain cases and where there were but one or two observations the mean is given to 0.1 mg., otherwise, and for three or more observations the mean is given to 0.01 mg.

The final observed magnitudes are given in column 5 of the catalogue. The magnitudes given in column 4 were taken in about equal numbers from three sources in the following order: Those to 0.01 are the Harvard photometric; those in italics are from the Bonn Catalogues, 1900 and 1925, which are visual determinations based on the Potsdam photometry; and those to 0.1 are the B. D. or C. D. corrected to the Harvard scale.

Many of the spectra in column 3 were kindly furnished by Doctor SHAPLEY in advance of publication.

COMPARISONS WITH OTHER CATALOGUES

Comparisons using the standard stars were made with the following catalogues:

Ei--------1,504 Standard Stars, by Eichelberger, 1925.
Bs-------Preliminary General Catalogue, by Boss, 1900.
N--------Catalogue of Fundamental Stars, by Newcomb, 1900.
Av-------The Revision of Auwers Fundamental Catalogue, by Kopff and his associates.
Gr$_{25}$------First Greenwich Catalogue of Stars for 1925.
Cp$_{25}$------First Cape Catalogue of Stars for 1925.
W$_{00}$-------Catalogue of 4,526 Stars, Washington, 1900.
W$_{10}$-------Catalogue of 2,499 Stars, Washington, 1910.
W$_{20}$-------Denotes the present Catalogue.

REDUCTION OF THE STANDARD STARS TO 1925.0

For comparisons with other catalogues, many of which are given for the equinox 1925.0, the right ascensions and declinations of all standard stars were also reduced with the precessions and proper motions in the catalogue to the equinox and epoch 1925.0 and these are given on pages 343–365, with the catalogue number for identification.

With few exceptions the list is the same as the Greenwich 1925 Catalogue, observed at about the same epoch and reduced to 1925.0 with the same proper motions. The differences, $W_{20}-Gr_{25}$, are given for each star, and from these and the differences, $Gr_{25}-Bs$, given in Appendix II to the Greenwich Catalogue, the differences, $W_{20}-Bs$, were obtained. In forming the differences with Eichelberger, $W_{20}-Ei_{25}$, the reductions were made using Eichelberger's proper motions. These differences represent corrections to the comparison catalogues at about 1919.

COMPARISON OF RIGHT ASCENSIONS

The right ascension differences, $W_{20}-Gr_{25}$, $W_{20}-Bs$, $W_{20}-Ei$, given for each standard star on pages 343-365 were collected in groups proceeding according to right ascension and declination as given in the following three tables. The weighted mean for each zone of declination given in the second column as $\Delta\alpha_\delta$ has been taken out, leaving the rest of the table $\Delta\alpha_\alpha$. The $\Delta\alpha_\delta$ includes difference in equinox corrections. The first of the four wider sub-zones (+80° to +60°), gives $\Delta\alpha \cos\delta$.

Differences of Right Ascensions, $W_{20}-Gr_{25}$

Decl.	$\Delta\alpha_\delta$	$\Delta\alpha_\alpha$							
		0^{h}–3^{h}	3^{h}–6^{h}	6^{h}–9^{h}	9^{h}–12^{h}	12^{h}–15^{h}	15^{h}–18^{h}	18^{h}–21^{h}	21^{h}–24^{h}
° °	s	s	s	s	s	s	s	s	s
+90 to +85	$-.069_{27}$	$+.225_{3}$	$+.071_{5}$	$-.025_{3}$	$+.153_{3}$	$+.030_{4}$	$-.086_{3}$	$-.094_{3}$	$-.244_{3}$
+85 to +80	$-.062_{37}$	$+.050_{4}$	$+.123_{3}$	$+.051_{6}$	$+.022_{5}$	$-.049_{5}$	$-.033_{5}$	$-.057_{6}$	$-.080_{3}$
+80 to +75	$+.021_{45}$	$+.029_{5}$	$+.055_{5}$	$+.118_{5}$	$+.039_{4}$	$+.008_{5}$	$-.037_{8}$	$-.070_{8}$	$-.068_{5}$
+75 to +70	$+.021_{47}$	$+.024_{5}$	$+.027_{5}$	$+.058_{5}$	$+.022_{5}$	$+.025_{6}$	$-.044_{4}$	$-.040_{8}$	$-.035_{9}$
+70 to +65	$.000_{50}$	$+.017_{10}$	$+.033_{4}$	$+.048_{7}$	$+.022_{11}$	$-.046_{6}$	$-.032_{8}$	$-.037_{6}$	$-.018_{7}$
+65 to +60	$-.008_{61}$	$-.003_{9}$	$+.015_{8}$	$+.048_{7}$	$+.040_{7}$	$-.008_{7}$	$-.038_{6}$	$-.028_{8}$	$-.023_{9}$
+60 to +55	$-.018_{83}$	$+.020_{10}$	$-.004_{9}$	$+.049_{11}$	$+.027_{8}$	$+.006_{10}$	$-.031_{12}$	$-.030_{9}$	$-.023_{14}$
+55 to +50	$-.026_{72}$	$+.007_{12}$	$+.020_{8}$	$+.036_{8}$	$+.021_{8}$	$+.001_{9}$	$-.034_{9}$	$-.032_{10}$	$-.010_{8}$
+50 to +45	$-.032_{89}$	$+.015_{11}$	$+.015_{13}$	$+.005_{11}$	$+.023_{9}$	$-.010_{8}$	$-.019_{13}$	$-.021_{12}$	$-.002_{12}$
+45 to +40	$-.026_{102}$	$+.028_{12}$	$+ 010_{15}$	$+.025_{10}$	$+.009_{13}$	$-.012_{15}$	$-.028_{12}$	$-.023_{14}$	$-.002_{11}$
+40 to +35	$-.050_{117}$	$+.007_{13}$	$+.024_{14}$	$+.014_{10}$	$.000_{12}$	$-.011_{17}$	$-.014_{15}$	$-.011_{19}$	$+.001_{17}$
+35 to +30	$-.041_{102}$	$+.006_{10}$	$+.014_{11}$	$+.011_{13}$	$+.001_{14}$	$-.006_{9}$	$-.004_{21}$	$-.017_{14}$	$-.002_{10}$
+30 to +25	$-.032_{128}$	$+.003_{18}$	$+.006_{12}$	$+.005_{18}$	$+.008_{12}$	$-.010_{17}$	$-.012_{19}$	$-.001_{15}$	$+.003_{17}$
+25 to +20	$-.026_{123}$	$-.004_{14}$	$+.004_{20}$	$+.011_{19}$	$+.009_{16}$	$+.004_{11}$	$-.010_{12}$	$-.012_{16}$	$-.004_{15}$
+20 to +15	$-.024_{116}$	$+.015_{12}$	$+.013_{18}$	$-.002_{16}$	$+.002_{14}$	$-.010_{16}$	$-.011_{16}$	$-.013_{15}$	$+.008_{9}$
+15 to +10	$-.013_{125}$	$+.011_{16}$	$+.004_{15}$	$+.009_{18}$	$-.002_{17}$	$-.013_{13}$	$-.013_{14}$	$-.004_{18}$	$+.004_{14}$
+10 to + 5	$-.005_{135}$	$.000_{22}$	$+.006_{18}$	$-.001_{17}$	$+.005_{17}$	$+.001_{12}$	$-.005_{15}$	$-.006_{16}$	$-.002_{18}$
+ 5 to 0	$-.005_{123}$	$-.001_{15}$	$+.001_{12}$	$+.002_{13}$	$-.001_{18}$	$-.004_{14}$	$-.005_{15}$	$+.004_{15}$	$+.003_{21}$
0 to − 5	$+.003_{125}$	$+.007_{15}$	$+.001_{19}$	$-.002_{17}$	$.000_{15}$	$-.005_{13}$	$-.004_{13}$	$.000_{14}$	$+.004_{19}$
− 5 to −10	$.000_{121}$	$+.005_{13}$	$-.003_{20}$	$.000_{12}$	$-.012_{11}$	$+.005_{19}$	$.000_{14}$	$+.001_{16}$	$+.003_{16}$
−10 to −15	$+.001_{118}$	$-.005_{15}$	$-.003_{18}$	$+.004_{13}$	$.000_{14}$	$+.001_{15}$	$-.004_{13}$	$+.004_{14}$	$+.006_{16}$
−15 to −20	$+.007_{119}$	$-.004_{12}$	$-.001_{12}$	$-.003_{15}$	$+.007_{14}$	$-.005_{15}$	$+.005_{17}$	$-.004_{16}$	$+.004_{18}$
−20 to −25	$-.001_{118}$	$+.002_{14}$	$-.015_{17}$	$-.009_{15}$	$+.006_{11}$	$-.006_{17}$	$-.004_{13}$	$+.017_{15}$	$+.010_{16}$
−25 to −30	$+.004_{119}$	$+.002_{15}$	$-.010_{10}$	$.000_{12}$	$-.001_{13}$	$-.006_{12}$	$-.011_{20}$	$+.008_{22}$	$+.010_{15}$
+80 to +60	$+.001_{212}$	$+.002_{29}$	$+.009_{22}$	$+.020_{24}$	$+.010_{27}$	$-.003_{24}$	$-.012_{25}$	$-.013_{30}$	$-.010_{30}$
+60 to +30	$-.033_{565}$	$+.015_{68}$	$+.013_{70}$	$+.023_{63}$	$+.011_{64}$	$-.007_{68}$	$-.020_{82}$	$-.022_{78}$	$-.007_{72}$
+30 to 0	$-.017_{750}$	$+.004_{97}$	$+.006_{95}$	$+.003_{101}$	$+.004_{94}$	$-.007_{83}$	$-.010_{91}$	$-.006_{95}$	$+.002_{94}$
0 to −30	$+.002_{720}$	$+.002_{84}$	$-.005_{96}$	$-.001_{84}$	$+.001_{78}$	$-.002_{91}$	$-.003_{90}$	$+.005_{97}$	$+.007_{100}$

Differences of Right Ascensions, $W_{20} - Bs$

Decl.	$\Delta\alpha_\delta$	$\Delta\alpha_\alpha$							
		0^h–3^h	3^h–6^h	6^h–9^h	9^h–12^h	12^h–15^h	15^h–18^h	18^h–21^h	21^h–24^h
° °	s	s	s	s	s	s	s	s	s
+90 to +85	$+.070_{17}$	$+.206_{2}$	$-.042_{4}$	$+.161_{3}$	$-.145_{1}$	$+.342_{2}$	$-.294_{1}$	$+.006_{1}$	$-.301_{3}$
+85 to +80	$-.114_{31}$	$+.023_{3}$	$+.151_{3}$	$.000_{4}$	$+.089_{5}$	$-.105_{5}$	$-.001_{3}$	$+.017_{5}$	$-.170_{3}$
+80 to +75	$-.033_{30}$	$+.089_{2}$	$+.096_{3}$	$+.089_{3}$	$+.033_{2}$	$-.018_{4}$	$-.060_{7}$	$+.001_{5}$	$-.076_{4}$
+75 to +70	$-.025_{35}$	$+.019_{5}$	$-.031_{3}$	$+.069_{3}$	$-.040_{2}$	$+.020_{3}$	$-.010_{4}$	$-.018_{7}$	$-.005_{8}$
+70 to +65	$-.027_{44}$	$+.004_{6}$	$+.007_{4}$	$-.017_{7}$	$+.029_{7}$	$+.011_{6}$	$-.024_{7}$	$-.014_{4}$	$+.005_{3}$
+65 to +60	$-.037_{45}$	$.000_{7}$	$-.032_{6}$	$+.015_{7}$	$+.027_{4}$	$+.010_{4}$	$+.022_{4}$	$-.022_{6}$	$+.001_{7}$
+60 to +55	$-.035_{61}$	$-.029_{6}$	$-.024_{7}$	$-.008_{7}$	$+.026_{6}$	$+.033_{9}$	$-.012_{8}$	$-.005_{8}$	$+.007_{10}$
+55 to +50	$-.043_{48}$	$+.009_{9}$	$-.003_{5}$	$-.019_{4}$	$-.023_{6}$	$+.017_{8}$	$+.003_{4}$	$+.002_{8}$	$-.003_{4}$
+50 to +45	$-.036_{64}$	$+.007_{8}$	$+.010_{10}$	$-.015_{8}$	$+.042_{4}$	$-.013_{6}$	$-.009_{12}$	$-.014_{6}$	$+.001_{10}$
+45 to +40	$-.029_{71}$	$+.005_{8}$	$-.011_{10}$	$-.018_{7}$	$+.014_{11}$	$-.003_{9}$	$-.004_{8}$	$-.008_{9}$	$+.018_{9}$
+40 to +35	$-.043_{77}$	$+.001_{9}$	$+.007_{12}$	$-.001_{8}$	$+.004_{7}$	$-.019_{8}$	$-.012_{9}$	$+.007_{14}$	$+.006_{10}$
+35 to +30	$-.046_{82}$	$+.003_{7}$	$-.001_{5}$	$-.010_{6}$	$-.010_{11}$	$-.010_{4}$	$+.012_{13}$	$-.009_{9}$	$+.012_{7}$
+30 to +25	$-.034_{89}$	$+.011_{13}$	$-.024_{6}$	$-.016_{13}$	$+.007_{7}$	$-.007_{14}$	$-.004_{15}$	$+.022_{11}$	$+.005_{10}$
+25 to +20	$-.028_{89}$	$+.022_{11}$	$-.005_{17}$	$-.018_{16}$	$-.004_{10}$	$-.006_{6}$	$+.011_{7}$	$.000_{13}$	$+.018_{9}$
+20 to +15	$-.020_{86}$	$+.018_{8}$	$+.002_{17}$	$-.006_{15}$	$-.021_{10}$	$-.011_{10}$	$+.003_{11}$	$+.012_{10}$	$+.013_{5}$
+15 to +10	$-.014_{81}$	$+.033_{10}$	$-.017_{6}$	$-.013_{13}$	$+.002_{11}$	$-.018_{11}$	$-.008_{7}$	$+.011_{14}$	$+.007_{9}$
+10 to + 5	$-.013_{99}$	$+.004_{17}$	$-.000_{17}$	$-.014_{13}$	$-.006_{16}$	$+.009_{6}$	$+.002_{7}$	$+.003_{10}$	$+.005_{13}$
+ 5 to 0	$-.005_{92}$	$+.008_{13}$	$-.006_{10}$	$-.020_{9}$	$-.001_{13}$	$-.014_{9}$	$+.009_{14}$	$+.005_{8}$	$+.004_{16}$
0 to − 5	$-.006_{88}$	$+.018_{12}$	$-.011_{12}$	$-.025_{12}$	$+.006_{11}$	$-.013_{9}$	$-.002_{8}$	$+.016_{9}$	$+.010_{14}$
− 5 to −10	$-.004_{86}$	$+.012_{10}$	$-.014_{18}$	$-.037_{5}$	$-.002_{6}$	$-.007_{13}$	$+.005_{8}$	$+.012_{13}$	$+.016_{13}$
−10 to −15	$-.001_{90}$	$+.004_{9}$	$-.009_{13}$	$-.014_{10}$	$-.005_{11}$	$-.002_{11}$	$+.001_{10}$	$+.010_{12}$	$+.011_{14}$
−15 to −20	$-.002_{86}$	$+.007_{6}$	$-.003_{7}$	$-.010_{13}$	$+.002_{8}$	$-.008_{8}$	$-.005_{16}$	$+.008_{15}$	$+.009_{13}$
−20 to −25	$+.002_{75}$	$+.001_{7}$	$-.030_{10}$	$-.006_{11}$	$-.011_{5}$	$-.007_{9}$	$+.005_{8}$	$+.020_{13}$	$+.014_{12}$
−25 to −30	$+.010_{76}$	$-.006_{6}$	$-.015_{7}$	$+.005_{8}$	$+.003_{9}$	$-.013_{8}$	$-.014_{13}$	$+.014_{19}$	$+.010_{6}$
−30 to −36	$-.002_{95}$	$+.018_{8}$	$+.001_{16}$	$-.020_{12}$	$-.024_{12}$	$+.012_{13}$	$+.009_{11}$	$+.012_{8}$	$+.004_{15}$
+80 to +60	$-.011_{154}$	$+.004_{20}$	$-.002_{16}$	$+.006_{20}$	$+.008_{15}$	$+.003_{17}$	$-.006_{22}$	$-.005_{22}$	$-.003_{22}$
+60 to +30	$-.039_{384}$	$+.001_{47}$	$-.001_{49}$	$-.010_{40}$	$+.006_{45}$	$+.004_{44}$	$-.003_{54}$	$-.004_{55}$	$+.009_{50}$
+30 to 0	$-.019_{337}$	$+.015_{72}$	$-.005_{73}$	$-.015_{79}$	$-.003_{67}$	$-.010_{56}$	$+.002_{61}$	$+.008_{67}$	$+.009_{62}$
0 to −30	$-.001_{501}$	$+.008_{50}$	$-.014_{67}$	$-.014_{60}$	$.000_{50}$	$-.007_{58}$	$-.002_{63}$	$+.015_{81}$	$+.011_{73}$

Differences of Right Ascensions, $W_{20}-Ei$

Decl.	$\Delta\alpha_\delta$	$\Delta\alpha_\alpha$							
		0^h–3^h	3^h–6^h	6^h–9^h	9^h–12^h	12^h–15^h	15^h–18^h	18^h–21^h	21^h–24^h
° °	s	s	s	s	s	s	s	s	s
+90 to +85	$+.084_{20}$	$-.033_{3}$	$-.085_{4}$	$-.093_{3}$	$-.010_{1}$	$+.142_{2}$	$+.180_{2}$	$+.022_{2}$	$+.014_{3}$
+85 to +80	$+.082_{28}$	$-.017_{2}$	$+.035_{3}$	$-.088_{4}$	$-.013_{5}$	$-.033_{4}$	$+.018_{2}$	$+.001_{5}$	$+.118_{3}$
+80 to +75	$+.063_{28}$	$+.006_{3}$	$.000_{3}$	$+.004_{3}$	$+.056_{2}$	$.000_{4}$	$+.041_{5}$	$-.063_{5}$	$-.009_{3}$
+75 to +70	$+.067_{32}$	$-.004_{4}$	$-.021_{2}$	$+.040_{2}$	$+.012_{3}$	$+.015_{4}$	$+.012_{3}$	$-.007_{6}$	$-.018_{8}$
+70 to +65	$+.054_{34}$	$-.012_{6}$	$-.012_{3}$	$+.019_{4}$	$+.027_{6}$	$+.003_{3}$	$.000_{6}$	$-.033_{3}$	$-.016_{3}$
+65 to +60	$+.065_{32}$	$+.012_{5}$	$-.039_{4}$	$+.010_{4}$	$+.023_{3}$	$-.007_{4}$	$-.008_{3}$	$+.005_{4}$	$-.002_{5}$
+60 to +55	$+.049_{40}$	$-.003_{5}$	$-.047_{3}$	$+.012_{5}$	$+.002_{5}$	$+.009_{5}$	$-.002_{5}$	$+.003_{4}$	$+.006_{8}$
+55 to +50	$+.044_{31}$	$-.011_{6}$	$+.008_{4}$	$-.007_{3}$	$+.016_{3}$	$-.001_{3}$	$+.016_{4}$	$-.024_{5}$	$+.015_{3}$
+50 to +45	$+.031_{42}$	$-.005_{5}$	$+.002_{8}$	$-.022_{4}$	$+.024_{4}$	$-.001_{3}$	$-.005_{6}$	$+.002_{5}$	$+.005_{7}$
+45 to +40	$+.025_{54}$	$+.013_{5}$	$-.013_{8}$	$-.002_{5}$	$+.007_{7}$	$+.012_{9}$	$-.008_{7}$	$-.002_{7}$	$-.001_{6}$
+40 to +35	$+.015_{58}$	$-.007_{6}$	$-.006_{6}$	$+.001_{3}$	$-.003_{5}$	$-.011_{8}$	$-.003_{9}$	$+.002_{13}$	$+.010_{8}$
+35 to +30	$+.024_{52}$	$-.003_{5}$	$-.011_{5}$	$+.007_{6}$	$-.008_{8}$	$+.002_{4}$	$+.013_{10}$	$-.004_{8}$	$.000_{6}$
+30 to +25	$+.031_{58}$	$+.005_{9}$	$-.009_{6}$	$-.004_{9}$	$+.001_{4}$	$-.007_{8}$	$+.006_{10}$	$+.005_{6}$	$-.001_{6}$
+25 to +20	$+.032_{56}$	$-.001_{7}$	$-.004_{10}$	$+.002_{9}$	$.000_{7}$	$-.002_{4}$	$.000_{5}$	$+.004_{7}$	$-.009_{7}$
+20 to +15	$+.035_{55}$	$+.012_{4}$	$-.001_{11}$	$+.005_{10}$	$+.007_{4}$	$+.001_{7}$	$-.009_{8}$	$-.003_{7}$	$+.003_{4}$
+15 to +10	$+.035_{57}$	$+.008_{7}$	$-.013_{5}$	$+.010_{9}$	$-.002_{10}$	$-.008_{5}$	$+.001_{5}$	$+.003_{10}$	$-.006_{6}$
+10 to + 5	$+.032_{65}$	$-.002_{13}$	$+.008_{10}$	$+.001_{7}$	$.000_{10}$	$+.001_{4}$	$+.003_{5}$	$-.004_{7}$	$-.008_{9}$
+ 5 to 0	$+.031_{61}$	$-.003_{7}$	$+.005_{6}$	$+.012_{5}$	$+.002_{10}$	$-.010_{7}$	$+.012_{8}$	$+.001_{6}$	$-.008_{12}$
0 to − 5	$+.035_{57}$	$-.006_{6}$	$+.008_{9}$	$+.004_{7}$	$+.004_{9}$	$-.004_{5}$	$-.005_{5}$	$+.001_{8}$	$-.009_{8}$
− 5 to −10	$+.031_{61}$	$.000_{6}$	$+.002_{13}$	$+.012_{4}$	$-.011_{4}$	$+.003_{10}$	$-.003_{4}$	$-.002_{10}$	$-.004_{10}$
−10 to −15	$+.035_{51}$	$-.008_{7}$	$-.005_{7}$	$+.001_{6}$	$+.012_{4}$	$+.007_{7}$	$-.006_{5}$	$+.005_{5}$	$-.006_{10}$
−15 to −20	$+.033_{55}$	$-.004_{4}$	$+.012_{4}$	$+.006_{6}$	$+.015_{6}$	$+.007_{8}$	$+.001_{9}$	$-.013_{10}$	$-.010_{8}$
−20 to −25	$+.041_{47}$	$+.003_{5}$	$-.004_{9}$	$+.021_{6}$	$-.015_{3}$	$-.017_{6}$	$+.006_{5}$	$+.007_{5}$	$-.006_{8}$
−25 to −30	$+.043_{47}$	$-.006_{5}$	$.000_{4}$	$+.024_{5}$	$-.002_{5}$	$+.008_{3}$	$-.010_{9}$	$-.005_{11}$	$-.009_{5}$
−30 to −36	$+.046_{46}$	$+.004_{4}$	$+.019_{10}$	$+.010_{6}$	$+.001_{6}$	$-.015_{4}$	$-.012_{5}$	$-.003_{5}$	$-.010_{7}$
+80 to +60	$+.020_{126}$	$.000_{18}$	$-.008_{12}$	$+.006_{13}$	$+.009_{14}$	$.000_{15}$	$+.002_{17}$	$-.006_{18}$	$-.004_{19}$
+60 to +30	$+.029_{277}$	$-.001_{32}$	$-.007_{34}$	$+.002_{26}$	$+.004_{32}$	$+.001_{32}$	$+.001_{41}$	$-.005_{42}$	$+.007_{38}$
+30 to 0	$+.033_{352}$	$+.002_{47}$	$-.001_{48}$	$+.004_{49}$	$+.001_{45}$	$-.004_{35}$	$+.002_{41}$	$+.001_{43}$	$-.006_{44}$
0 to −30	$+.036_{318}$	$-.003_{33}$	$+.002_{46}$	$+.014_{34}$	$+.002_{31}$	$.000_{39}$	$-.002_{37}$	$-.003_{49}$	$-.007_{49}$

The quantities in the four subzones above, were expressed analytically. The comparisons with A_v were made through common comparisons with Bs.

Differences of Right Ascensions, Periodic

Cat.	Zones		Sin α	Cos α	Sin 2α	Cos 2α
	° °		s	s	s	s
$W_{20}-Gr_{25}$	+80 to +60	$\Delta\alpha_a \cos\delta$	+0. 015	−0. 005	−0. 001	0. 000
	+60 to +30	$\Delta\alpha_a$	+ . 022	+ . 001	. 000	+ . 002
	+30 to 0	$\Delta\alpha_a$	+ . 007	+ . 003	− . 001	+ . 001
	0 to −30	$\Delta\alpha_a$	− . 002	+ . 003	− . 002	+ . 001
$W_{20}-Bs$	+80 to +60	$\Delta\alpha_a \cos\delta$	+ . 005	− . 003	− . 001	+ . 002
	+60 to +30	$\Delta\alpha_a$	− . 001	+ . 001	− . 002	+ . 003
	+30 to 0	$\Delta\alpha_a$	− . 006	+ . 010	. 000	+ . 002
	0 to −30	$\Delta\alpha_a$	− . 009	+ . 008	− . 003	+ . 002
$W_{20}-Ei$	+80 to +60	$\Delta\alpha_a \cos\delta$	+ . 002	− . 005	− . 001	+ . 001
	+60 to +30	$\Delta\alpha_a$	− . 001	− . 001	− . 001	+ . 002
	+30 to 0	$\Delta\alpha_a$	+ . 001	− . 001	. 000	− . 001
	0 to −30	$\Delta\alpha_a$	+ . 005	− . 004	− . 001	− . 002
$W_{20}-A_v$	+80 to +60	$\Delta\alpha_a \cos\delta$	+ . 004	− . 007	− . 001	. 000
	+60 to +30	$\Delta\alpha_a$	+ . 005	− . 008	. 000	. 000
	+30 to 0	$\Delta\alpha_a$	− . 001	+ . 002	. 000	. 000
	0 to −30	$\Delta\alpha_a$	− . 001	− . 004	− . 003	. 000

The following comparisons in the equatorial belt are important in showing the comparative freedom from periodic errors of the clock system. The comparisons are very satisfactory, especially that with A_v representing the most recent fundamental work. The comparisons with A_v, Cp_{25}, W_{10}, were made through Bs or Ei.

Differences of Right Ascensions, $\Delta\alpha_a(+30° \text{ to } -30°)$

Cat.	0^h 3^h	3^h–6^h	6^h–9^h	9^h–12^h	12^h–15^h	15^h–18^h	18^h–21^h	21^h–24^h
	s	s	s	s	s	s	s	s
$W_{20}-A_v$	+0. 003	−0. 001	0. 000	+0. 001	−0. 005	0. 000	+0. 002	0. 000
$W_{20}-Ei$	. 000	+ . 001	+ . 007	+ . 002	− . 001	+ . 001	− . 001	− . 006
$W_{20}-W_{00}$	+ . 002	− . 005	− . 004	+ . 001	. 000	+ . 002	+ . 004	− . 002
$W_{20}-W_{10}$	− . 001	− . 004	− . 003	+ . 001	− . 002	+ . 003	+ . 006	. 000
$W_{20}-Cp_{25}$	+ . 004	+ . 004	+ . 011	+ . 007	− . 008	− . 001	− . 004	− . 012
$W_{20}-Gr_{25}$	+ . 003	. 000	+ . 001	+ . 003	− . 004	− . 007	. 000	+ . 005

Comparisons in the form $\Delta\alpha \cos\delta$ are given in the following table. The quantities at the bottom of each column, which are the average differences for the zone +30° to −30°, and represent approximately the differences in equinox, have been taken out. This instrument reproduces itself, $W_{20}-W_{00}$ and the 6-inch, $W_{20}-W_{10}$, within $0^s.01$. The deviations from the fundamental positions A_v approximate $0^s.02$ near the zenith, and have reversal of sign at large zenith distances. They are systematic and, though small, probably represent in part real deviations in this catalogue.

Differences of Right Ascensions, $\Delta\alpha \cos \delta$

Decl.	$W_{20}-A_v$	$W_{20}-Ei$	$W_{20}-W_{00}$	$W_{20}-W_{10}$	$W_{20}-Gr_{25}$	$W_{20}-Bs$	$W_{20}-N$	$W_{20}-Cp_{25}$
° °	s	s	s	s	s	s	s	s
+90 to +85		+0. 002	+0. 001	+0. 006	−0. 003	+0. 004		
+85 to +80	+0. 008	+ . 006	. 000	− . 001	− . 006	− . 012		
+80 to +75	+ . 011	+ . 006	+ . 002	+ . 010	+ . 006	− . 005		
+75 to +70	+ . 013	+ . 010	+ . 002	+ . 012	+ . 008	− . 004	−0. 005	
+70 to +65	+ . 010	+ . 007	. 000	+ . 011	+ . 003	− . 006	− . 011	
+65 to +60	+ . 010	+ . 014	+ . 009	+ . 008	. 000	− . 012	− . 017	
+60 to +55	+ . 004	+ . 008	+ . 009	+ . 004	− . 005	− . 013	− . 030	
+55 to +50	− . 004	+ . 006	− . 001	+ . 001	− . 011	− . 020	− . 044	
+50 to +45	− . 009	− . 002	. 000	− . 003	− . 016	− . 017	− . 046	
+45 to +40	− . 012	− . 007	. 000	− . 007	− . 013	− . 014	− . 047	
+40 to +35	− . 021	− . 015	− . 014	− . 013	− . 033	− . 026	− . 046	
+35 to +30	− . 018	− . 008	− . 014	− . 010	− . 028	− . 030	− . 044	
+30 to +25	− . 010	− . 003	− . 009	− . 006	− . 021	− . 021	− . 038	−0. 013
+25 to +20	− . 007	− . 002	− . 006	− . 004	− . 017	− . 017	− . 031	− . 007
+20 to +15	− . 006	+ . 001	+ . 002	− . 004	− . 015	− . 010	− . 022	− . 002
+15 to +10	− . 002	+ . 001	+ . 003	+ . 003	− . 005	− . 004	− . 013	. 000
+10 to + 5	− . 004	− . 002	+ . 001	− . 001	+ . 003	− . 003	− . 009	− . 001
+ 5 to 0	+ . 001	− . 003	+ . 004	+ . 003	+ . 003	+ . 005	− . 005	+ . 004
0 to − 5	. 000	+ . 001	+ . 003	+ . 001	+ . 011	+ . 004	− . 004	+ . 002
− 5 to −10	. 000	− . 003	+ . 001	− . 001	+ . 008	+ . 006	− . 004	+ . 003
−10 to −15	+ . 003	+ . 001	. 000	− . 001	+ . 009	+ . 009	+ . 004	+ . 004
−15 to −20	+ . 002	− . 001	. 000	− . 001	+ . 014	+ . 008	+ . 013	+ . 002
−20 to −25	+ . 009	+ . 006	. 000	+ . 003	+ . 006	+ . 011	+ . 026	+ . 003
−25 to −30	+ . 016	+ . 008	+ . 008	+ . 008	+ . 011	+ . 018	+ . 039	+ . 010
−30 to −35	+ . 013	+ . 010	. 000	+ . 008		+ . 007		
+30 to −30	(− . 011)	(+ . 034)	(+ . 008)	(+ . 033)	(− . 008)	(− . 010)	(− . 016)	(− . 012)

As by means of the screen system all stars brighter than magnitude 9.5 were screened to the same apparent magnitude, there should be no variation of right ascension with magnitude.

For the brighter stars the differences in right ascension for each star with Bs, Ei, and Gr_{25}, were grouped according to the magnitude of the star as shown in the table below. The examination was restricted to the equatorial belt +35° to −35°, and to the stars common to Cp_{25}, from which catalogue the individual differences $Cp_{25}-Bs$ were also taken and compared with $W_{20}-Bs$, to give $W_{20}-Cp_{25}$. The differences for W_{10} and A_v were derived through common group comparisons with Bs. In these comparison catalogues the magnitude equations have been largely eliminated by use of screens, traveling threads, and application of corrections for magnitude equation, and the results show that the variations in W_{20} are equally small.

The most available comparison for faint stars was with the 1920 catalogue of Berlin-Bablesberg, +31° to +40°, observed about the same epoch and reduced to the same equinox. These observations were made with a travelling thread, screens were used, and within the limit of each screen corrections for magnitude equation were applied. The differences in right ascension, $W_{20}-BB_{20}$, grouped according to magnitude as given below, are satisfactory in showing little variation with magnitude in either catalogue.

Differences of Right Ascensions, $\Delta\alpha_m$, Bright Stars, +35° to −35°

Mag.	0 to 2.9	3.0 to 3.9	4.0 to 4.4	4.5 to 4.9	5.0 to 5.4	5.5 to 5.8	5.9 to 6.3	6.4 to 6.9
	s	s	s	s	s	s	s	s
$\mathrm{W}_{20}-\mathrm{Ei}$	+0. 001	+0. 001	+0. 002	+0. 001	+0. 002	+0. 002	−0. 007	−0. 003
$\mathrm{W}_{20}-\mathrm{Cp}_{25}$	+ . 001	− . 004	− . 002	− . 003	− . 001	+ . 003	− . 003	+ . 007
$\mathrm{W}_{20}-\mathrm{Gr}_{25}$	− . 009	− . 002	− . 001	− . 001	− . 001	+ . 003	+ . 004	+ . 004
$\mathrm{W}_{20}-\mathrm{W}_{10}$	− . 002	− . 003	− . 003	− . 002	− . 002	+ . 004	− . 005	+ . 009
$\mathrm{W}_{20}-\mathrm{A}_v$	− . 009	− . 003	− . 001	+ . 001	− . 005	+ . 004	− . 002	+ . 011
$\mathrm{W}_{20}-\mathrm{Bs}$	− . 012	− . 005	− . 002	. 000	− . 004	+ . 005	. 000	+ . 014
No. stars	57	118	98	131	200	179	103	43

Differences of Right Ascensions, $\Delta\alpha_m$, Faint Stars, +31° to +40°

Mag.	5 to 5.9	6.0 to 6.9	7.0 to 7.9	8.0 to 8.4	8.5 to 8.9	9.0 to 9.4	9.5 to 9.9	10.0+
	s	s	s	s	s	s	s	s
$\mathrm{W}_{20}-\mathrm{BB}_{20}$	−0. 001	−0. 007	−0. 001	+0. 004	−0. 003	+0. 004	+0. 004	+0. 002
No. stars	56	63	88	109	137	171	96	15

The fainter stars are being so extensively observed now that intercomparisons become prohibitive, and they are probably not necessary. A large number of well-spaced standard stars are now in use, and their observation with the faint stars allows determination of the systematic differences between catalogues to be made through them, especially for observations freed from magnitude effects. An example of this is the comparison $\mathrm{W}_{20}-\mathrm{BB}_{20}$ just given above. The Berlin Catalogue was referred to AUWERS positions, and it contains 120 other standards. The differences between the two catalogues are the same for the standards as for the faint stars, as follows:

$\mathrm{W}_{20}-\mathrm{BB}_{20}$	Magnitude	No.	$\Delta\alpha$	$\Delta\delta$
			s	″
Standard stars	0 to 6. 9	180	−0. 064	+0. 08
Faint stars	7 to 10. 5	615	− . 063	+ . 07

Except for their systematic comparisons with the A. G. Catalogues for use in the proper motion computations, the intermediary stars were not compared with other observations.

COMPARISON OF DECLINATIONS

The declination differences, $\mathrm{W}_{20}-\mathrm{Gr}_{25}$, $\mathrm{W}_{20}-\mathrm{Bs}$, and $\mathrm{W}_{20}-\mathrm{Ei}$, given for each standard star on pages 343–365 were collected in groups proceeding according to right ascension and declination as given in the following three tables. The weighted mean for each zone of declination given in the second column as $\Delta\delta_\delta$ has been taken out, leaving the rest of the table $\Delta\delta_\alpha$.

Differences of Declinations, $W_{20} - Gr_{25}$

Decl.	$\Delta\delta_\delta$	$\Delta\delta_\alpha$							
		0^h–3^h	3^h–6^h	6^h–9^h	9^h–12^h	12^h–15^h	15^h–18^h	18^h–21^h	21^h–24^h
° °	″	″	″	″	″	″	″	″	″
+90 to +85	$-.09_{28}$	$+.14_{3}$	$+.02_{5}$	$+.21_{3}$	$+.09_{3}$	$+.04_{4}$	$+.04_{3}$	$-.32_{4}$	$-.16_{3}$
+85 to +80	$-.04_{37}$	$+.10_{4}$	$+.30_{3}$	$-.06_{6}$	$-.04_{5}$	$-.15_{5}$	$-.09_{5}$	$+.05_{6}$	$+.05_{3}$
+80 to +75	$+.06_{45}$	$+.13_{5}$	$+.19_{5}$	$-.02_{5}$	$+.21_{4}$	$+.11_{5}$	$-.12_{8}$	$-.29_{8}$	$+.05_{5}$
+75 to +70	$+.07_{47}$	$+.12_{5}$	$-.14_{5}$	$+.07_{5}$	$+.02_{5}$	$+.05_{6}$	$+.05_{4}$	$-.07_{8}$	$-.03_{9}$
+70 to +65	$+.16_{59}$	$+.04_{10}$	$-.13_{4}$	$+.02_{7}$	$+.16_{11}$	$-.04_{6}$	$-.05_{8}$	$-.22_{6}$	$+.04_{7}$
+65 to +60	$+.19_{61}$	$-.02_{9}$	$-.18_{8}$	$+.11_{7}$	$.00_{7}$	$+.06_{7}$	$+.02_{6}$	$-.03_{8}$	$+.04_{9}$
+60 to +55	$+.23_{83}$	$.00_{10}$	$+.08_{9}$	$.00_{11}$	$+.08_{8}$	$-.05_{10}$	$+.07_{12}$	$-.05_{9}$	$-.08_{14}$
+55 to +50	$+.24_{72}$	$+.03_{12}$	$+.14_{8}$	$+.10_{8}$	$+.04_{8}$	$-.05_{9}$	$+.02_{9}$	$-.16_{10}$	$-.08_{8}$
+50 to +45	$+.13_{89}$	$+.01_{11}$	$+.11_{13}$	$-.08_{11}$	$+.15_{9}$	$+.02_{8}$	$-.04_{13}$	$-.10_{12}$	$-.06_{12}$
+45 to +40	$+.09_{102}$	$+.01_{12}$	$+.01_{15}$	$+.23_{10}$	$-.05_{13}$	$.00_{15}$	$-.03_{12}$	$-.03_{14}$	$-.14_{11}$
+40 to +35	$+.24_{117}$	$-.03_{13}$	$+.16_{14}$	$-.01_{10}$	$-.08_{12}$	$+.04_{17}$	$+.11_{15}$	$-.01_{19}$	$-.17_{17}$
+35 to +30	$+.19_{102}$	$-.06_{10}$	$+.20_{11}$	$-.02_{13}$	$+.07_{14}$	$-.17_{9}$	$-.02_{21}$	$+.03_{14}$	$-.09_{10}$
+30 to +25	$+.24_{128}$	$-.03_{18}$	$-.13_{12}$	$-.07_{18}$	$.00_{12}$	$+.04_{17}$	$+.10_{19}$	$+.04_{15}$	$-.01_{17}$
+25 to +20	$+.35_{123}$	$-.08_{14}$	$+.06_{20}$	$+.11_{19}$	$+.09_{16}$	$-.16_{11}$	$-.15_{12}$	$+.01_{16}$	$-.05_{15}$
+20 to +15	$+.34_{116}$	$-.02_{12}$	$+.07_{18}$	$-.02_{16}$	$+.02_{14}$	$-.01_{16}$	$-.13_{16}$	$+.09_{15}$	$-.07_{9}$
+15 to +10	$+.20_{125}$	$+.08_{16}$	$+.11_{15}$	$+.01_{18}$	$-.09_{17}$	$-.05_{13}$	$-.02_{14}$	$+.10_{18}$	$-.15_{14}$
+10 to + 5	$+.18_{135}$	$-.03_{22}$	$-.02_{18}$	$+.09_{17}$	$+.06_{17}$	$-.11_{12}$	$-.21_{15}$	$+.07_{16}$	$+.12_{18}$
+ 5 to 0	$+.20_{123}$	$-.08_{15}$	$+.13_{12}$	$+.10_{13}$	$+.12_{18}$	$+.06_{14}$	$-.14_{15}$	$-.02_{15}$	$-.09_{21}$
0 to − 5	$+.18_{125}$	$-.01_{15}$	$+.10_{19}$	$+.09_{17}$	$+.02_{15}$	$-.14_{13}$	$-.14_{13}$	$+.08_{14}$	$-.05_{19}$
− 5 to −10	$+.09_{121}$	$+.10_{13}$	$+.09_{20}$	$+.12_{12}$	$-.11_{11}$	$+.03_{19}$	$-.11_{14}$	$-.18_{16}$	$+.07_{16}$
−10 to −15	$-.08_{118}$	$-.03_{15}$	$+.29_{18}$	$+.27_{13}$	$+.03_{14}$	$-.28_{15}$	$-.20_{13}$	$-.10_{14}$	$-.05_{16}$
−15 to −20	$-.16_{119}$	$-.06_{12}$	$+.11_{12}$	$+.03_{15}$	$+.15_{14}$	$-.10_{15}$	$-.17_{17}$	$+.02_{16}$	$+.04_{18}$
−20 to −25	$-.27_{118}$	$+.02_{14}$	$+.15_{17}$	$+.25_{15}$	$-.10_{11}$	$-.11_{17}$	$-.10_{13}$	$-.03_{15}$	$-.10_{16}$
−25 to −30	$-.47_{119}$	$+.20_{15}$	$+.07_{10}$	$-.11_{12}$	$+.16_{13}$	$+.11_{12}$	$-.19_{20}$	$-.01_{22}$	$-.15_{15}$
+90 to +60	$+.08_{277}$	$+.08_{36}$	$-.03_{30}$	$+.04_{33}$	$+.09_{35}$	$+.01_{33}$	$-.04_{34}$	$-.14_{40}$	$+.02_{36}$
+60 to +30	$+.18_{565}$	$.00_{68}$	$+.11_{70}$	$+.04_{63}$	$+.03_{64}$	$-.02_{68}$	$+.03_{82}$	$-.04_{78}$	$-.10_{72}$
+30 to 0	$+.25_{750}$	$-.03_{97}$	$+.05_{95}$	$+.04_{101}$	$+.04_{94}$	$-.03_{83}$	$-.08_{91}$	$+.05_{95}$	$-.04_{94}$
0 to −30	$-.12_{720}$	$+.04_{84}$	$+.18_{96}$	$+.13_{84}$	$+.04_{78}$	$-.07_{91}$	$-.18_{90}$	$-.06_{97}$	$-.03_{100}$

Differences of Declinations, $W_{20}-Bs$

Decl.	$\Delta\delta_\delta$	$\Delta\delta_\alpha$							
		0^h-3^h	3^h-6^h	6^h-9^h	9^h-12^h	12^h-15^h	15^h-18^h	18^h-21^h	21^h-24^h
° °	″	″	″	″	″	″	″	″	″
+90 to +85	$-.08_{17}$	$-.08_{2}$	$-.07_{4}$	$-.11_{3}$	$-.12_{1}$	$-.01_{2}$	$+.29_{1}$	$+.19_{1}$	$+.14_{3}$
+85 to +80	$-.03_{31}$	$-.04_{3}$	$+.16_{3}$	$+.04_{4}$	$-.16_{5}$	$+.07_{5}$	$+.11_{3}$	$-.20_{5}$	$+.18_{3}$
+80 to +75	$+.05_{31}$	$-.33_{2}$	$-.06_{3}$	$+.21_{3}$	$+.17_{2}$	$-.01_{4}$	$+.14_{7}$	$-.03_{6}$	$-.25_{4}$
+75 to +70	$+.11_{35}$	$-.21_{5}$	$-.24_{3}$	$-.07_{3}$	$+.16_{2}$	$+.19_{3}$	$+.11_{4}$	$+.15_{7}$	$-.03_{8}$
+70 to +65	$+.09_{44}$	$-.15_{6}$	$-.12_{4}$	$+.17_{7}$	$-.02_{7}$	$+.15_{6}$	$-.09_{7}$	$+.05_{4}$	$-.03_{3}$
+65 to +60	$+.07_{45}$	$-.19_{7}$	$-.16_{6}$	$+.08_{7}$	$+.06_{4}$	$+.25_{4}$	$+.16_{4}$	$+.16_{6}$	$-.19_{7}$
+60 to +55	$+.18_{61}$	$+.04_{6}$	$.00_{7}$	$-.04_{7}$	$+.23_{6}$	$+.05_{9}$	$-.02_{8}$	$+.07_{8}$	$-.22_{10}$
+55 to +50	$+.33_{48}$	$-.12_{9}$	$-.10_{5}$	$-.02_{4}$	$+.04_{6}$	$+.01_{8}$	$+.15_{4}$	$+.01_{8}$	$+.17_{4}$
+50 to +45	$+.42_{64}$	$-.21_{8}$	$+.01_{10}$	$-.05_{8}$	$-.08_{4}$	$+.13_{6}$	$+.13_{12}$	$-.04_{6}$	$+.02_{10}$
+45 to +40	$+.41_{71}$	$-.10_{8}$	$-.21_{10}$	$-.08_{7}$	$-.03_{11}$	$+.20_{9}$	$+.13_{8}$	$+.10_{9}$	$+.09_{9}$
+40 to +35	$+.47_{77}$	$.00_{9}$	$+.05_{12}$	$-.12_{8}$	$+.02_{7}$	$+.13_{8}$	$+.04_{9}$	$-.06_{14}$	$-.05_{10}$
+35 to +30	$+.55_{62}$	$-.14_{7}$	$+.25_{5}$	$-.13_{6}$	$+.16_{11}$	$-.21_{4}$	$+.05_{13}$	$+.05_{9}$	$-.17_{7}$
+30 to +25	$+.47_{89}$	$-.21_{13}$	$-.11_{6}$	$-.02_{13}$	$-.03_{7}$	$+.03_{14}$	$+.19_{15}$	$+.01_{11}$	$+.06_{10}$
+25 to +20	$+.52_{89}$	$-.31_{11}$	$+.05_{17}$	$-.07_{16}$	$+.10_{10}$	$+.05_{6}$	$+.03_{7}$	$+.02_{13}$	$+.26_{9}$
+20 to +15	$+.46_{86}$	$-.09_{8}$	$-.20_{17}$	$-.02_{15}$	$-.02_{10}$	$+.08_{10}$	$+.26_{11}$	$+.01_{10}$	$+.20_{5}$
+15 to +10	$+.47_{82}$	$+.12_{10}$	$-.03_{6}$	$-.21_{13}$	$-.06_{11}$	$-.11_{11}$	$+.18_{7}$	$+.11_{14}$	$+.05_{9}$
+10 to + 5	$+.27_{99}$	$-.02_{17}$	$+.04_{17}$	$-.12_{13}$	$-.07_{16}$	$+.04_{6}$	$-.04_{7}$	$+.08_{10}$	$+.10_{13}$
+ 5 to 0	$+.37_{92}$	$-.06_{13}$	$+.11_{10}$	$-.10_{9}$	$+.04_{13}$	$+.06_{9}$	$+.05_{14}$	$+.04_{8}$	$-.04_{16}$
0 to − 5	$+.20_{88}$	$-.09_{12}$	$+.05_{12}$	$-.33_{12}$	$+.17_{11}$	$+.07_{9}$	$+.13_{8}$	$+.24_{9}$	$-.08_{14}$
− 5 to −10	$+.27_{86}$	$+.13_{10}$	$.00_{18}$	$-.26_{5}$	$-.32_{6}$	$+.16_{13}$	$+.21_{8}$	$-.13_{13}$	$.00_{13}$
−10 to −15	$+.21_{90}$	$-.22_{9}$	$-.11_{13}$	$-.09_{10}$	$-.12_{11}$	$+.05_{11}$	$+.35_{10}$	$+.02_{12}$	$+.12_{14}$
−15 to −20	$+.25_{86}$	$-.18_{6}$	$-.38_{7}$	$-.23_{13}$	$+.04_{8}$	$+.20_{8}$	$+.20_{16}$	$+.11_{15}$	$+.03_{13}$
−20 to −25	$+.13_{75}$	$-.14_{7}$	$-.33_{10}$	$+.02_{11}$	$+.19_{5}$	$+.22_{9}$	$+.11_{8}$	$-.01_{13}$	$+.05_{12}$
−25 to −30	$+.24_{76}$	$-.12_{6}$	$-.34_{7}$	$-.13_{8}$	$+.02_{9}$	$+.23_{8}$	$.00_{13}$	$+.08_{19}$	$+.15_{6}$
−30 to −36	$+.15_{94}$	$+.14_{8}$	$-.21_{16}$	$-.23_{12}$	$+.03_{12}$	$+.05_{13}$	$+.34_{11}$	$-.13_{7}$	$+.09_{15}$
+90 to +60	$+.04_{203}$	$-.15_{25}$	$-.10_{23}$	$+.08_{27}$	$.00_{21}$	$+.12_{24}$	$+.10_{26}$	$+.06_{29}$	$-.05_{28}$
+60 to +30	$+.40_{394}$	$-.09_{47}$	$-.02_{49}$	$-.08_{40}$	$+.08_{45}$	$+.05_{44}$	$+.09_{54}$	$+.01_{55}$	$-.05_{50}$
+30 to 0	$+.42_{537}$	$-.10_{72}$	$-.02_{73}$	$-.07_{79}$	$-.02_{67}$	$+.04_{56}$	$+.13_{61}$	$+.07_{67}$	$+.07_{62}$
0 to −30	$+.22_{501}$	$-.09_{50}$	$-.14_{67}$	$-.19_{60}$	$.00_{50}$	$+.15_{58}$	$+.17_{63}$	$+.05_{81}$	$+.02_{72}$

Differences of Declinations, $W_{20}-Ei$

Decl.	$\Delta\delta_\delta$	$\Delta\delta_\alpha$							
		0^h–3^h	3^h–6^h	6^h–9^h	9^h–12^h	12^h–15^h	15^h–18^h	18^h–21^h	21^h–24^h
° °	″	″	″	″	″	″	″	″	″
+90 to +85	$-.01_{20}$	$-.03_{3}$	$-.05_{4}$	$-.03_{3}$	$+.20_{1}$	$+.13_{2}$	$+.06_{2}$	$-.14_{2}$	$+.04_{3}$
+85 to +80	$-.12_{28}$	$+.22_{2}$	$+.23_{3}$	$+.01_{4}$	$+.05_{5}$	$-.10_{4}$	$+.04_{2}$	$-.30_{5}$	$+.14_{3}$
+80 to +75	$+.07_{28}$	$-.04_{3}$	$-.03_{3}$	$+.23_{3}$	$+.35_{2}$	$+.15_{4}$	$-.13_{5}$	$-.16_{5}$	$-.14_{3}$
+75 to +70	$-.01_{32}$	$-.10_{4}$	$-.15_{2}$	$+.06_{2}$	$+.16_{3}$	$+.20_{4}$	$+.13_{3}$	$+.01_{6}$	$-.17_{8}$
+70 to +65	$+.06_{34}$	$-.05_{6}$	$+.02_{3}$	$+.11_{4}$	$.00_{6}$	$+.23_{3}$	$+.02_{6}$	$-.16_{3}$	$-.15_{3}$
+65 to +60	$+.07_{32}$	$-.11_{5}$	$-.14_{4}$	$+.04_{4}$	$+.03_{3}$	$+.26_{4}$	$+.09_{3}$	$-.04_{4}$	$-.05_{5}$
+60 to +55	$-.02_{40}$	$-.13_{5}$	$+.35_{3}$	$-.01_{5}$	$+.11_{5}$	$-.04_{5}$	$-.03_{5}$	$-.05_{4}$	$-.03_{8}$
+55 to +50	$+.04_{31}$	$-.08_{6}$	$.00_{4}$	$-.01_{3}$	$+.08_{3}$	$+.16_{3}$	$+.04_{4}$	$-.16_{5}$	$+.17_{3}$
+50 to +45	$+.09_{42}$	$-.02_{5}$	$-.05_{8}$	$+.03_{4}$	$+.05_{4}$	$-.06_{3}$	$+.10_{6}$	$-.02_{5}$	$+.03_{7}$
+45 to +40	$+.02_{55}$	$.00_{5}$	$-.07_{8}$	$-.06_{6}$	$+.06_{7}$	$+.03_{9}$	$+.12_{7}$	$.00_{7}$	$-.06_{6}$
+40 to +35	$+.10_{57}$	$-.25_{6}$	$-.08_{6}$	$-.29_{3}$	$+.11_{5}$	$+.04_{8}$	$+.17_{9}$	$+.09_{12}$	$-.11_{8}$
+35 to +30	$+.10_{52}$	$-.19_{5}$	$+.02_{5}$	$-.06_{8}$	$+.13_{8}$	$+.07_{4}$	$+.02_{10}$	$+.04_{8}$	$-.11_{6}$
+30 to +25	$+.04_{58}$	$-.04_{9}$	$-.05_{6}$	$+.11_{9}$	$-.10_{4}$	$+.06_{8}$	$+.05_{10}$	$-.04_{6}$	$-.09_{6}$
+25 to +20	$+.05_{56}$	$-.11_{7}$	$+.01_{10}$	$-.01_{9}$	$+.19_{7}$	$+.05_{4}$	$+.15_{5}$	$-.07_{7}$	$-.10_{7}$
+20 to +15	$+.03_{55}$	$-.07_{4}$	$-.11_{11}$	$+.02_{10}$	$+.16_{4}$	$+.07_{7}$	$+.07_{8}$	$-.05_{7}$	$+.02_{4}$
+15 to +10	$-.05_{57}$	$+.07_{7}$	$+.05_{5}$	$-.01_{9}$	$-.09_{10}$	$-.01_{5}$	$+.10_{5}$	$+.05_{10}$	$-.13_{6}$
+10 to + 5	$-.09_{65}$	$-.09_{13}$	$+.03_{10}$	$+.04_{7}$	$-.02_{10}$	$+.04_{4}$	$+.04_{5}$	$+.10_{7}$	$-.02_{9}$
+ 5 to 0	$-.12_{62}$	$-.17_{8}$	$+.07_{6}$	$-.01_{5}$	$+.05_{10}$	$+.05_{7}$	$+.05_{8}$	$+.10_{6}$	$-.05_{12}$
0 to − 5	$-.06_{57}$	$-.08_{6}$	$+.07_{9}$	$-.02_{7}$	$+.09_{9}$	$-.12_{5}$	$.00_{5}$	$+.02_{8}$	$-.03_{8}$
− 5 to −10	$-.14_{62}$	$-.07_{6}$	$-.01_{13}$	$+.11_{4}$	$-.16_{4}$	$+.08_{10}$	$+.13_{5}$	$-.08_{10}$	$+.03_{10}$
−10 to −15	$-.15_{50}$	$-.21_{7}$	$-.04_{7}$	$+.16_{6}$	$+.01_{4}$	$+.12_{6}$	$+.03_{5}$	$-.09_{5}$	$+.04_{10}$
−15 to −20	$-.09_{55}$	$-.16_{4}$	$+.10_{4}$	$-.34_{6}$	$-.02_{6}$	$+.22_{8}$	$+.08_{9}$	$-.01_{10}$	$+.05_{8}$
−20 to −25	$-.18_{47}$	$-.10_{5}$	$-.08_{9}$	$+.26_{6}$	$+.01_{3}$	$+.06_{6}$	$-.20_{5}$	$+.10_{5}$	$-.05_{8}$
−25 to −30	$-.29_{47}$	$-.24_{5}$	$-.22_{4}$	$-.15_{5}$	$+.17_{5}$	$+.16_{3}$	$+.05_{9}$	$+.13_{11}$	$-.07_{5}$
−30 to −36	$-.31_{45}$	$-.24_{4}$	$+.01_{8}$	$-.27_{7}$	$-.13_{6}$	$+.04_{4}$	$+.36_{5}$	$+.07_{5}$	$+.16_{7}$
+90 to +60	$+.01_{174}$	$-.03_{23}$	$-.02_{19}$	$+.07_{20}$	$+.07_{20}$	$+.14_{21}$	$+.04_{21}$	$-.13_{25}$	$-.08_{25}$
+60 to +30	$+.06_{277}$	$-.12_{32}$	$-.01_{34}$	$-.07_{27}$	$+.09_{32}$	$+.03_{32}$	$+.08_{41}$	$+.01_{41}$	$-.05_{38}$
+30 to 0	$-.02_{353}$	$-.08_{48}$	$-.01_{48}$	$+.04_{49}$	$.00_{45}$	$+.05_{35}$	$+.07_{41}$	$+.02_{43}$	$-.08_{44}$
0 to −30	$-.15_{318}$	$-.14_{33}$	$-.01_{46}$	$+.02_{34}$	$+.01_{31}$	$+.10_{39}$	$+.02_{38}$	$+.01_{49}$	$.00_{49}$

The quantities in the four subzones above were expressed analytically. The comparisons with A_v were made through common comparisons with Bs.

Differences of Declinations, Periodic

Cat.	Zones	Sin α	Cos α	Sin 2α	Cos 2α
	° °	″	″	″	″
$W_{20}-Gr_{25}$	+90 to +60	+0.06	−0.02	0.00	+0.03
	+60 to +30	+ .05	− .02	+ .02	− .02
	+30 to 0	+ .04	.00	− .02	− .01
	0 to −30	+ .14	+ .02	− .01	− .01
$W_{20}-Bs$	+90 to +60	− .06	− .09	− .01	− .02
	+60 to +30	− .05	− .06	+ .01	.00
	+30 to 0	− .09	− .01	.00	− .01
	0 to −30	− .15	− .06	+ .02	+ .02
$W_{20}-Ei$	+90 to +60	+ .03	− .10	+ .02	+ .01
	+60 to +30	− .04	− .07	.00	.00
	+30 to 0	− .02	− .06	.00	− .02
	0 to −30	− .03	− .06	− .01	− .01
$W_{20}-A_v$	+90 to +60	− .01	− .07	+ .01	+ .01
	+60 to +30	+ .01	− .01	.00	.00
	+30 to 0	+ .01	+ .03	− .01	− .01
	0 to −30	− .04	− .02	+ .01	+ .02

The following comparisons in the equatorial belt +30° to −30° are important in their bearing on annual terms in the equator point. The comparisons are satisfactory, especially that with A_v representing the most recent fundamental work.

Differences of Declinations, +30° to −30°

Cat.	0^h–3^h	3^h–6^h	6^h–9^h	9^h–12^h	12^h–15^h	15^h–18^h	18^h–21^h	21^h–24^h
	″	″	″	″	″	″	″	″
$W_{20}-A_v$	−0.02	0.00	+0.02	0.00	0.00	0.00	+0.01	−0.04
$W_{20}-Ei$	− .09	− .01	+ .03	+ .01	+ .07	+ .04	+ .01	− .05
$W_{20}-W_{00}$	− .08	− .05	− .01	− .01	+ .09	+ .06	− .03	+ .01
$W_{20}-W_{10}$	− .04	+ .01	+ .01	− .04	+ .05	+ .08	.00	− .04
$W_{20}-Cp_{25}$	− .08	− .05	+ .01	+ .01	+ .03	+ .06	+ .03	− .01
$W_{20}-Gr_{25}$	.00	+ .12	+ .08	+ .04	− .05	− .13	− .01	− .03

Comparisons in the form $\Delta\delta_s$ are given in the following table. The quantities at the bottom of each column which are the average differences for the zone +30° to −30° represent approximately the differences in equator points. The declinations of the present catalogue differ but 0″.2 from the fundamental catalogues A_v and (Ei), throughout the meridian. They are positive by 0″.1 to 0″.2 just south of the zenith and negative by similar amounts at the southern limit. The comparisons with (W_{10}), (W_{00}), N, and (Cp_{25}) were made through Bs. In these comparisons the corrections for equator points derived from discussions of the Sun, Moon, and planet observations were included in the individual catalogues (W_{00}), (W_{10}), Gr_{25}, and (Cp_{25}). The catalogues A_v, Ei, and N used this principle. (Ei) is a revision in Ei arising from revisions in the four catalogues used by him and which amounts to −0″.1 at the equator. And in this connection it is instructive to note the good agreement of catalogues corrected for equator point, and the necessity of including such corrections in the published catalogue as a part of its fundamental system. Such agreement has been further shown in Cp_{25} (p. xxxvi) and Gr_{25} (p. A–xvi). Additional comparisons $\Delta\delta_\delta$ with Cape II 1900 and San Luis 1910 are given by the residuals in the last columns of the tables on pages 56 and 57.

Differences of Declinations, $\Delta\delta_\delta$

Decl.	$W_{20}-A_v$	$W_{20}-(Ei)$	$W_{20}-(W_{00})$	$W_{20}-(W_{10})$	$W_{20}-Gr_{25}$	$W_{20}-(Bs)$	$W_{20}-N$	$W_{20}-(Cp_{25})$
° °	"	"	"	"	"	"	"	"
+90 to +85	−0. 11	−0. 01	0. 00	−0. 08	−0. 09	−0. 09		
+85 to +80	− . 12	− . 12	+ . 01	− . 04	− . 04	− . 05		
+80 to +75	− . 01	+ . 07	+ . 04	+ . 01	+ . 06	+ . 01		
+75 to +70	− . 04	− . 01	+ . 08	+ . 02	+ . 07	+ . 05	+0. 15	
+70 to +65	− . 01	+ . 06	+ . 08	− . 05	+ . 16	+ . 02	+ . 15	
+65 to +60	. 00	+ . 07	+ . 04	− . 09	+ . 19	− . 01	+ . 15	
+60 to +55	. 00	− . 02	+ . 09	− . 03	+ . 23	+ . 08	+ . 02	
+55 to +50	+ . 07	+ . 04	+ . 16	+ . 06	+ . 24	+ . 19	− . 12	
+50 to +45	+ . 11	+ . 09	+ . 16	+ . 12	+ . 13	+ . 25	+ . 01	
+45 to +40	+ . 05	− . 01	+ . 11	+ . 11	+ . 09	+ . 21	+ . 14	
+40 to +35	+ . 13	+ . 07	+ . 19	+ . 19	+ . 24	+ . 26	+ . 17	
+35 to +30	+ . 15	+ . 07	+ . 27	+ . 27	+ . 19	+ . 34	+ . 20	
+30 to +25	+ . 07	+ . 01	+ . 18	+ . 19	+ . 24	+ . 26	+ . 21	+0. 07
+25 to +20	+ . 12	+ . 06	+ . 19	+ . 26	+ . 35	+ . 31	+ . 22	+ . 09
+20 to +15	+ . 11	+ . 04	+ . 08	+ . 20	+ . 34	+ . 26	+ . 26	+ . 01
+15 to +10	+ . 09	. 00	+ . 09	+ . 21	+ . 20	+ . 28	+ . 31	+ . 03
+10 to + 5	− . 02	− . 04	− . 03	+ . 01	+ . 18	+ . 10	+ . 15	− . 13
+ 5 to 0	+ . 02	− . 05	+ . 11	+ . 15	+ . 20	+ . 21	− . 01	. 00
0 to − 5	− . 03	+ . 01	− . 02	+ . 01	+ . 18	+ . 04	− . 05	− . 15
− 5 to −10	− . 02	− . 06	+ . 10	+ . 12	+ . 09	+ . 10	− . 09	− . 08
−10 to −15	− . 04	− . 07	+ . 11	+ . 07	− . 08	+ . 03	− . 10	− . 16
−15 to −20	− . 01	+ . 01	+ . 19	+ . 11	− . 16	+ . 05	− . 12	− . 13
−20 to −25	− . 13	− . 08	+ . 08	− . 05	− . 27	− . 07	− . 02	− . 23
−25 to −30	− . 15	− . 21	+ . 21	. 00	− . 47	+ . 03	+ . 07	− . 17
−30 to −35	− . 23	− . 23	+ . 12	− . 15		− . 07		− . 37
+30 to −30	. 00	. 00	+ . 10	+ . 10	+ . 07	+ . 13	+ . 07	− . 07

REVISION OF THE 1900 CATALOGUE

The present reductions have furnished information applicable to some revision of the reductions of the previous work on this instrument, 1903–1913, as given in Vol. IX, more particularly as to the day terms and the fundamental declination system.

The derivation of personal equation corrections and of the difference between night and day observations in right ascension in the present work shows that the corrections for personal equation for the Sun, as reduced with night clock corrections, given on page A–cxlvii, Vol. IX, virtually included the day terms and are very much the same as found at present, and they should be applied. The personal equations for Mercury and Venus are not known but are small, and for them the night minus day correction $+0^s.04$ found in the present work should be applied.

The corrections to the Ephemeris declination of the Sun, 1903–1913, have the same clamp difference as found in the present observations; moreover, the amount and the variations with declination are similar. Day stars were not observed, except a few hundred near the ends of the day, but such observations an hour out in daylight show the same day terms as found in the present work. The day observations in 1903–1913 require, therefore, the same day corrections in declination as found in the present work and as given on page 64 above. Conforming to more recent discussions, small additional corrections to the tabular positions of the Moon have been used.

Various solutions were made of the circumpolar observations for correction to the refraction, with the conclusion that, as in the present work, the Pulkowa refractions, reduced to this latitude ($\Delta R = -0''.104$) have been adopted as best representing the Washington observations. See page 53 above.

Having corrected the declinations of the Sun, Moon, Mercury, and Venus as just indicated, the corrections to the Ephemeris declinations for these four objects for the 12 years were meaned in three declination groups, at the equator, and at about 20° each side of the equator, and one group mean was formed for the outer planets. The equator points so determined were combined with the circumpolar equations in a fundamental solution for the declination system. The form of the solution was suggested by the investigations in the present work, and also by preliminary comparisons with fundamental catalogues as follows: The declinations of the 1900 catalogue from 75° north to 75° south of the zenith, corrected for the small change in refraction ($0''.104-0''.134$), were compared with NEWCOMB and with the recent revision of Boss (*Astr. Jour.* No. 884), giving the following results; where the initial latitude is $+38° 55' 14''.37$.

Provisional Comparisons (W_{00}, 1903–13) with Newcomb and Boss

Decl.	N − W_{00}	v	(Bs) − W_{00}	v_1	v_2	v_3
°	″	″	″	″	″	″
+67 S.P.	−0.14	−0.07	−0.01	−0.04	+0.14	+0.06
+75 S.P.	− .11	− .06	− .01	− .07	− .09	− .01
+85 S.P.	+ .08	+ .10	+ .11	+ .03	− .07	+ .04
+85	+ .05	+ .07	+ .03	+ .09	+ .17	+ .11
+75	− .16	− .10	− .07	− .04	+ .02	+ .01
+65	− .15	− .04	− .03	+ .02	+ .03	+ .08
+55	− .02	+ .15	− .16	− .06	− .06	+ .03
+45	− .29	− .06	− .34	− .12	− .12	− .02
+35	− .27	+ .01	− .34	+ .01	+ .03	+ .10
+25	− .44	− .10	− .43	+ .03	+ .06	+ .11
+15	− .62	− .22	− .63	− .09	− .07	− .04
+ 5	− .46	− .01	− .60	− .03	− .06	− .03
− 5	− .43	+ .06	− .58	− .05	− .09	− .08
−15	− .36	+ .18	− .45	+ .07	.00	− .04
−25	− .61	− .04	− .44	+ .08	+ .07	− .11

The residuals are from the following solutions:

N − W_{00}, Latitude, $+38°55'14''.11$, $\Delta\delta = +0''.34 \sin Z$.
(Bs) − W_{00}, Latitude, $+38°55'14''.08$, $\Delta\delta_1 = +0''.35 \sin Z + 0''.10 \sin 4Z$.
(Bs) − W_{00}, Latitude, $+38°55'14''.07$, $\Delta\delta_2 = +0''.17 \tan Z + 0''.17 \sin 4Z$.
(Bs) − W_{00}, Latitude, $+38°55'14''.35$, $\Delta\delta_3 = -0''.46 \cos \delta + 0''.11 \sin 4Z$.

These results from comparisons with fundamental catalogues agree closely with the independent solutions from the observations themselves given below, where for the circumpolars,

$$2\Delta\varphi + b(\sin Z' + \sin Z) = \delta' - \delta$$

and for the Sun, Moon and planets

$$\Delta\varphi + b \sin Z = \text{Eph.} - \delta$$

The differences below minus above pole ($\delta' - \delta$) are those given in the last column page A–cxxvii to A–cxxix, Vol. IX, taken in groups of nearly equal weight, and with the small correction for refraction.

Solution of Pole and Equator Points (W_{00}, 1903–13)

Decl.	Δδ	O−C		Decl.	Δδ	O−C	
Pole Stars				*Pole Stars*			
°	″	″	″	°	″	″	″
+65. 2	−0. 17	−0. 12		+86. 7	−0. 19	−0. 19	−0. 01
+66. 3	+ . 09	+ . 14		+87. 2	+ . 14	+ . 14	
+67. 4	− . 10	− . 06		+87. 7	− . 04	− . 04	
+68. 6	+ . 12	+ . 16		+88. 2	− . 05	− . 05	
+69. 7	+ . 16	+ . 19		+88. 7	+ . 23	+ . 23	
+70. 5	− . 07	− . 04	+0. 04	+88. 8	+ . 12	+ . 12	
+72. 1	− . 07	− . 05		+89. 0	− . 17	− . 17	+ . 04
+72. 7	− . 10	− . 08					
+73. 8	− . 14	− . 12		*Sun*			
+74. 7	− . 08	− . 06		+20. 0	− . 54	− . 11	
+76. 1	+ . 07	+ . 08		0. 0	− . 59	− . 05	
+77. 1	− . 03	− . 02	− . 04	−20. 0	− . 66	− . 03	
+77. 6	. 00	+ . 01					
+78. 3	+ . 10	+ . 11		*Moon*			
+79. 5	+ . 10	+ . 11		+20. 0	− . 04	+ . 39	
+81. 7	− . 09	− . 09		0. 0	− . 35	+ . 19	
+82. 1	− . 10	− . 10		−20. 0	− . 72	− . 09	
+82. 5	+ . 06	+ . 06	+ . 02				
+84. 4	− . 06	− . 06		*Planets*			
+85. 3	+ . 19	+ . 19		+20. 0	− . 81	− . 38	− . 03
+85. 7	− . 12	− . 12		0. 0	− . 72	− . 18	− . 01
+86. 4	+ . 13	+ . 13		−20. 0	− . 42	+ . 21	+ . 03
+86. 6	− . 01	− . 01					

The solution gives:

$$\text{Latitude, } +38°55'14''.07, \quad \Delta\delta = +0''.39 \sin Z$$

with the residuals in the last columns.

The coefficient ($\sin Z + \sin Z'$) for the circumpolars is so nearly a constant that the residuals are practically unchanged from the refraction solution, but the actual variations with zenith distance, as shown in the Boss comparison are materially improved, and the latitude is more in accord with other determinations. The declinations were reduced with flexure from the collimators, to which the reflection observations indicate a correction of 0″.13. The observations therefore give an additional term +0″.2 sin Z, the same as found on page 53 for the present work. Such a term may be due to errors in collimator measures, to flexure, or to refraction effects.

Solutions of the above residuals were also made using tan Z and cos δ instead of sin Z with the following results:

$$\text{Latitude, } +38^\circ\ 55'\ 14''.06,\quad \Delta\delta = +0''.25 \tan Z + 0''.09 \sin 4Z$$
$$\text{Latitude, } +38^\circ\ 55'\ 14''.36,\quad \Delta\delta = -0''.55 \cos \delta$$

The large coefficient in tan Z gives inadmissible residuals in the circumpolars. The cosine form is not symmetrical with the zenith, as flexure or refraction effects should be, and the corresponding latitude stands out from accepted determinations.

The fundamental solution has been adopted giving the following correction to the declinations of the 1903–1913 work, as derived from the work itself, and so keeping it independent.

$$\Delta\delta = -0''.34 + 0''.03 \tan Z + 0''.39 \sin Z$$

Corrections to the Declinations of the Catalogue (W_{00}, *1903–13*)

Decl.	$\Delta\delta$	Decl.	$\Delta\delta$	Decl.	$\Delta\delta$	Decl.	$\Delta\delta$
°	″	°	″	°	″	°	″
+66 S.P.	−0. 15	+85	−0. 03	+35	−0. 37	−15	−0. 69
+67 S.P.	− . 13	+80	− . 05	+30	− . 40	−20	− . 72
+68 S.P.	− . 13	+75	− . 09	+25	− . 44	−25	− . 75
+69 S.P.	− . 12	+70	− . 12	+20	− . 47	−30	− . 78
+70 S.P.	− . 12	+65	− . 16	+15	− . 51	−31	− . 79
+75 S.P.	− . 09	+60	− . 19	+10	− . 55	−32	− . 80
+80 S.P.	− . 05	+55	− . 22	+ 5	− . 58	−33	− . 80
+85 S.P.	− . 02	+50	− . 26	0	− . 60	−34	− . 81
+90 S.P.	. 00	+45	− . 30	− 5	− . 64	−35	− . 81
+90	. 00	+40	− . 34	−10	− . 66	−36	− . 83

In forming his Standard Catalogue from the Washington and Cape observations, **Eichelberger** corrected W_{00} by $-0''.48 \cos \delta$.

The corrected declinations give the following comparisons with other catalogues. The comparisons were made through Boss; and (Bs), and A_v, are the recent revisions of Bs and A.

Differences in Declinations (W_{00}, *1903–13*), *minus Catalogue*

Decl.	(Bs)	A_v	N	Ei	W_{20}	(W_{10})
°	″	″	″	″	″	″
+67 S.P.	−0. 06	−0. 05	+0. 07	−0. 04		
+75 S.P.	− . 05	. 00	+ . 05	− . 03		
+85 S.P.	− . 13	− . 14	− . 10	− . 12		
+85	− . 06	− . 07	− . 08	− . 05	−0. 01	−0. 07
+75	− . 01	+ . 04	+ . 08	+ . 01	− . 06	− . 04
+65	− . 10	− . 09	+ . 02	− . 06	− . 06	− . 13
+55	− . 03	− . 02	− . 17	− . 13	− . 12	− . 10
+45	+ . 08	+ . 08	+ . 03	− . 03	− . 14	− . 02
+35	+ . 01	+ . 01	− . 06	− . 03	− . 23	. 00
+25	+ . 04	− . 02	+ . 05	− . 06	− . 18	+ . 04
+15	+ . 17	+ . 15	+ . 16	− . 02	− . 08	+ . 12
+ 5	+ . 08	+ . 01	− . 06	− . 10	− . 04	+ . 04
− 5	+ . 01	+ . 07	− . 14	− . 14	− . 04	+ . 02
−15	− . 16	− . 10	− . 25	− . 25	− . 15	− . 06
−27	− . 22	− . 17	− . 05	− . 34	− . 14	− . 07

The observations of the Sun, Moon, Mercury, and Venus from 1903 to 1913 corrected as above outlined were then solved for equinox, equator point, and obliquity by the same methods as used in preceding pages, with the following results:

Corrections for Equinox, Equator, and Obliquity (W_{00}, *1903–13*)

Object	No. Obs.	$\Delta\alpha_o$	$\Delta\delta_o$	$\Delta\epsilon$	$\Delta\lambda$	Δe	$\Delta\pi$
		s	″	″	″	″	″
Sun	1,400	−0.054	−0.08	+0.06	+0.25	−0.13	−2.45
Moon	1,000	− .037	+ .14	− .09	+1.00		
Mercury	500	− .083	− .20	+ .16			
Venus	600	− .060	− .08	+ .15			
Planets	400		− .08				
Mean		− .054	− .04	+ .05			

The equinox correction $-0^s.054$ to the provisional clock system, or $-0^s.024$ to NEWCOMB, for the 277 clock stars, −16° to +30°, is the same as that determined and applied in the 1900 catalogue. This discussion therefore gives no further correction to the right ascensions of that catalogue. This equinox is the same as that found on page 73 for the present work. Had no correction for personal equation been applied it would have been about the same as NEWCOMB's.

The right ascensions of the Sun, Moon, and planets, as published in Volume IX, were referred to the provisional equinox of the clock stars; they require, therefore, the correction $-0^s.053$ to reduce them to the equinox of the catalogue, or $-0^s.024$ to reduce them to NEWCOMB's equinox. The right ascensions of the Sun require the further correction for personal equation including day terms as given on page A–cxlvii, Volume IX, and the right ascensions of Mercury and Venus require the day correction $+0^s.04$.

The equator point correction, $-0''.04$, gives little further correction to the fundamental system just established. The declinations in the 1900 catalogue and of the Sun, Moon, and planet observations in Volume IX require, therefore, the correction

$$\Delta\delta = -0.''34 + 0.''03 \tan Z + 0.''39 \sin Z$$

as given in the table on page 99. The declinations of the Sun, Mercury, and Venus require the further correction, night minus day, given on page 64 of this volume.

RESULTS OF OBSERVATIONS

OF THE

SUN, MOON, AND PLANETS

FROM 1913 TO 1925

EXPLANATION

In the following pages are given the final observed right ascensions and declinations of the Sun, Moon, and planets and the corresponding corrections to the American Ephemeris, or to other tabular places.

As already explained, besides the usual corrections for instrumental constants, pivots, clock corrections, motion, defection, and semidiameter, the right ascensions were corrected for personal equation (p. 33); semidiameter correction for the Moon (p. 66), day terms (p. 62); and equinox correction (p. 73).

And besides the usual corrections for instrumental constants, division errors, flexure, refraction, latitude, variation of latitude, clamp difference, motion, defection, semidiameter, and parallax; the declinations were corrected for day terms (p. 64); personal equations for the Sun (p. 49); semidiameter correction for the Moon (p. 66); and corrections to the provisional latitude, refraction, and flexure (p. 53).

Corrections to tabular places have been collected by years, or otherwise, and given here following the individual results.

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Date	Obsr.	Cl.	App. R. A. of Center	Corr. to Am. Eph.	Trans. Semi-diam.	Corr. to Am. Eph.	App. Decl. of Center	Corr. to Am. Eph.	Vert. Semi-diam.	Corr. to Am. Eph.
1918			h m s	s	s	s	° ′ ″	″	′ ″	″
Sept. 30.0	P	W	12 24 39. 523	+0. 193	64. 339	+0. 079	− 2 40 0. 58	−0. 28	15 59. 08	−1. 30
Oct. 1.0	P		12 28 16. 505	+ . 075	64. 378	+ . 078	− 3 3 19. 94	+ . 06	16 0. 26	− . 39
4.0	P		12 39 9. 714	+ . 174	64. 583	+ . 153	− 4 13 5. 18	+ . 82	16 0. 56	− . 91
8.0	Sr		12 53 45. 390	+ . 110	64. 732	+ . 072	− 5 45 22. 38	+1. 02	16 1. 60	− . 99
10.0	Sr		13 1 5. 594	+ . 034	64. 766	− . 024	− 6 31 7. 71	−1. 31	16 2. 42	− . 73
11.0	Sr		13 4 46. 436	+ . 076	64. 733	− . 127	− 6 53 49. 50	+ . 80	16 1. 00	−2. 43
14.0	M		13 15 51. 670	+ . 050	65. 057	− . 033	− 8 1 25. 34	+ . 76	16 2. 94	−1. 34
15.0	M		13 19 34. 476	+ . 096	65. 175	+ . 005	− 8 23 45. 07	− . 07	16 3. 48	−1. 07
17.0	M		13 27 1. 671	+ . 131	65. 277	− . 063	− 9 8 1. 22	− . 22	16 3. 80	−1. 31
18.0	M		13 30 46. 034	+ . 054	65. 319	− . 101	− 9 29 57. 77	− . 37	16 2. 36	−3. 03
21.0	P		13 42 3. 073	+ . 113	65. 787	+ . 087	−10 34 54. 83	+ . 87	16 5. 60	− . 60
22.0	P		13 45 49. 975	+ . 055	65. 862	+ . 072	−10 56 14. 12	+2. 88	16 5. 90	− . 56
28.0	Sr		14 9				−13 0 46. 82	+ . 18	16 6. 11	−1. 89
31.0	Sr		14 20 25. 377	+ . 097	66. 659	− . 081	−14 0 23. 37	+ . 33	16 7. 35	−1. 40
Nov. 1.0	Sr		14 24 19. 890	+ . 160	66. 841	− . 009	−14 19 49. 71	+ . 09	16 7. 86	−1. 14
4.0	M		14 36 8. 051	+ . 101	67. 207	+ . 007	−15 16 42. 88	+ . 42	16 9. 34	− . 40
7.0	M		14 48 3. 712	+ . 162	67. 560	. 000	−16 11 20. 30	+1. 10	16 9. 93	− . 54
8.0	M		14 52 3. 797	+ . 057	67. 619	− . 061	−16 29 1. 47	+ . 43	16 9. 64	−1. 07
11.0	P		15 4 9. 318	+ . 038	68. 232	+ . 192	−17 20 21. 13	+ . 77	16 11. 04	− . 38
12.0	P		15 8 12. 861	+ . 071	68. 207	+ . 047	−17 36 51. 94	+1. 26	16 10. 84	− . 82
14.0	P		15 16 22. 356	+ . 056	68. 460	+ . 060	−18 9 1. 13	− . 63	16 11. 10	−1. 01
15.0	P		15 20 28. 387	+ . 087	68. 537	+ . 027	−18 24 34. 97	+ . 83	16 11. 59	− . 74
19.0	Sr		15 37 0. 776	+ . 116	68. 947	− . 023	−19 23 38. 19	+ . 21	16 12. 22	− . 94
26.0	M		16 6 29. 150	+ . 150	69. 713	− . 017	−20 53 15. 92	+2. 38	16 13. 76	− . 68
29.0	M		16 19 18. 603	+ . 013	70. 002	− . 028	−21 25 57. 46	+2. 14	16 13. 22	−1. 71
Dec. 2.0	P		16 32 14. 694	+ . 184	70. 356	+ . 056	−21 55 0. 47	+ . 83	16 14. 27	−1. 13
5.0	P		16 45 16. 349	+ . 179	70. 596	+ . 046	−22 20 15. 84	− . 34	16 16. 57	+ . 73
12.0	Sr		17 15 58. 051	+ . 121	70. 880	− . 100	−23 3 45. 85	+ . 25	16 15. 62	1. 10
17.0	M		17 38 4. 339	+ . 009	71. 135	− . 045	−23 21 9. 46	+2. 14	16 15. 42	−1. 82
19.0	M		17 46 56. 595	+ . 125	71. 195	− . 025	−23 24 53. 59	+ . 71	16 16. 14	−1. 22
20.0	M		17 51 22. 991	+ . 221	71. 125	− . 105	−23 26 2. 67	+ . 73	16 15. 36	−2. 07
23.0	P		18 4 42. 246	+ . 016	71. 389	+ . 139	−23 26 41. 27	− . 47	16 16. 63	− . 97
26.0	P	W	18 18 1. 888	+ . 088	71. 288	+ . 058	−23 23 4. 73	−1. 13	16 17. 06	− . 66
1919										
Jan. 6.0	M	E	19 6 39. 363	+ . 013	70. 799	− . 011	−22 33 52. 31	− . 11	16 16. 42	−1. 39
7.0	M		19 11 2. 502	+ . 082	70. 681	− . 059	−22 26 39. 54	+ . 46	16 16. 75	−1. 05
10.0	M		19 24 8. 522	+ . 032	70. 487	− . 033	−22 2 24. 97	+ . 13	16 16. 11	−1. 60
13.0	P		19 37 9. 399	+ . 069	70. 344	+ . 054	−21 34			
16.0	P		19 50 4. 483	+ . 053	70. 029	+ . 009	−21 2 24. 82	+2. 08	16 16. 44	− . 98
20.0	Sr		20 7 8. 412	+ . 152	69. 522	− . 108	−20 14 21. 02	+ . 68	16 15. 37	−1. 72
21.0	Sr		20 11 22. 462	+ . 042	69. 443	− . 087	−20 1 21. 87	+ . 63	16 14. 44	−2. 55
24.0	Sr		20 24 0. 519	+ . 129	69. 235	+ . 025	−19 20 11. 16	− . 16	16 16. 31	− . 36
27.0	M		20 36 31. 430	+ . 010	68. 795	− . 075	−18 35 46. 44	+ . 16	16 14. 83	−1. 48
28.0	M		20 40 40. 240	+ . 070	68. 700	− . 060	−18 20 17. 94	− . 54	16 14. 23	−1. 95
30.0	M		20 48 55. 387	+ . 117	68. 482	− . 048	−17 48 18. 30	+1. 50	16 14. 03	−1. 89
31.0	M		20 53 1. 628	+ . 038	68. 374	− . 036	−17 31 51. 55	+ . 55	16 14. 60	−1. 18
Feb. 3.0	P		21 5 15. 724	+ . 094	68. 125	+ . 055	−16 40 37. 95	+1. 15	16 14. 46	− . 89
6.0	P		21 17 22. 213	+ . 053	67. 845	+ . 115	−15 46 48. 02	+2. 08	16 14. 62	. 27
7.0	P		21 21 22. 768	+ . 088	67. 663	+ . 053	−15 28 20. 16	+ . 74	16 14. 25	− . 48
11.0	Sr		21 37 16. 627	+ . 067	67. 066	− . 104	−14 11 51. 63	+ . 47	16 12. 29	−1. 75
18.0	M		22 4 36. 159	+ . 069	66. 416	− . 014	−11 49 15. 54	+ . 16	16 11. 52	1. 15
20.0	M		22 12 18. 092	− . 048	66. 179	− . 051	−11 6 41. 88	+1. 82	16 10. 49	1. 74
24.0	P		22 27 34. 519	+ . 019	65. 920	+ . 060	− 9 39 36. 60	+ . 60	16 10. 76	− . 56
27.0	P		22 38 55. 455	− . 075	65. 710	+ . 110	− 8 32 41. 97	+1. 23	16 10. 02	− . 60
Mar. 3.0	Sr		22 53 56. 118	+ . 118	65. 218	− . 092	− 7 1 46. 19	+ . 81	16 7. 46	−2. 19
4.0	Sr		22 57 39. 077	+ . 117	65. 144	− . 096	− 6 38 47. 06	+ . 04	16 7. 24	−2. 17
6.0	Sr		23 5 6. 287	+ . 097	65. 139	+ . 029	− 5 52 32. 22	− . 62	16 9. 38	+ . 46
7.0	Sr		23 8 48. 726	+ . 056	65. 062	+ . 012	− 5 29 15. 24	+1. 26	16 7. 20	−1. 48
10.0	M		23 19 53 671	+ . 011	64. 850	− . 030	− 4 19 6. 85	+ . 55	16 6. 74	−1. 18
18.0	P	E	23 49 12. 561	− . 009	64. 585	+ . 025	− 1 10 9. 76	+ . 84	16 4. 89	− . 93

SUN

Date		Obsr.	Cl.	App. R. A. of Center	Corr. to Am. Eph.	Trans. Semi-diam.	Corr. to Am. Eph.	App. Decl. of Center	Corr. to Am. Eph.	Vert. Semi-diam.	Corr. to Am. Eph.
1919				h m s	s	s	s	° ′ ″	″	′ ″	″
Mar.	20.0	P	E	23 56 30. 103	+0. 053	64. 573	+0. 053	− 0 22 46. 36	−0. 26	16 3. 50	−1. 77
	21.0	P		0 0 8. 652	+ . 082	64. 576	+ . 076	+ 0 0 55. 68	− . 02	16 5. 39	+ . 39
	24.0	Sr		0 11 3. 659	+ . 089	64. 419	− . 031	+ 1 11 55. 41	+ . 01	16 4. 09	− . 07
	25.0	Sr	E	0 14 41. 832	+ . 052	64. 418	− . 022	+ 1 35 32. 89	+ . 69	16 3. 52	− . 36
Apr.	8.0	P	W	1 6				+ 6 59 33. 13	+ . 43	15 59. 24	− . 78
	18.0	Sr		1 42 31. 065	+ . 055	65. 048	− . 052	+10 37 35. 02	+ . 82	15 57. 40	+ . 05
	21.0	M		1 53 40. 608	+ . 008	65. 346	+ . 066	+11 39 49. 54	− . 36	15 55. 76	− . 79
	22.0	M		1 57 24. 755	+ . 085	65. 335	− . 005	+12 0 13. 12	+ . 32	15 55. 16	−1. 12
	29.0	P		2 23 46. 825	+ . 075	65. 820	− . 020	+14 17 6. 05	+ . 45	15 53. 16	−1. 35
May	2.0	P		2 35 12. 474	− . 016	66. 264	+ . 194	+15 12 20. 66	+ . 16	15 54. 86	+1. 07
	5.0	Sr		2 46 43. 000	+ . 010	66. 265	− . 045	+16 5 20. 20	+ . 60	15 51. 64	−1. 46
	12.0	M		3 13 53. 374	+ . 074	66. 883	+ . 003	+17 59 22. 11	+ . 01	15 50. 94	− . 67
	13.0	M		3 18				+18 14 30. 60	+1. 10	15 50. 96	− . 45
	15.0	M		3 25 40. 473	+ . 023	67. 108	− . 022	+18 43 48. 96	− . 04	15 49. 98	−1. 02
	19.0	P		3 41 31. 361	+ . 021	67. 505	+ . 055	+19 38 39. 33	+ . 43	15 49. 54	− . 67
	22.0	P		3 53 30. 550	+ . 060	67. 702	+ . 022	+20 16 17. 91	+ . 41	15 49. 84	+ . 20
	23.0	P		3 57 31. 350	+ . 020	67. 823	+ . 073	+20 28 9. 82	+ . 52	15 49. 32	− . 14
	26.0	Sr		4 9 37. 137	+ . 067	67. 884	− . 076	+21 1 37. 47	+ . 07	15 47. 24	−1. 70
	27.0	Sr		4 13 40. 100	+ . 070	68. 020	− . 010	+21 12 4. 13	+ . 53	15 47. 82	− . 96
	29.0	Sr		4 21 47. 436	+ . 036	68. 080	− . 080	+21 31 50. 22	+ . 12	15 47. 27	−1. 20
June	2.0	M		4 38 7. 564	+ . 114	68. 335	− . 065	+22 6 53. 53	+ . 63	15 46. 17	−1. 73
	3.0	M		4 42 13. 484	+ . 034	68. 360	− . 100	+22 14 41. 61	+ . 31	15 46. 36	−1. 41
	13.0	P		5 23 30. 304	+ . 094	68. 962	+ . 112	+23 11 0. 90	+ . 60	15 46. 56	− . 13
	16.0	Sr		5 35 57. 526	+ . 006	68. 805	− . 105	+23 20 0. 71	− . 19	15 44. 67	−1. 76
	17.0	Sr		5 40 7. 019	+ . 129	68. 841	− . 079	+23 22 13. 34	+1. 54	15 46. 42	+ . 07
	19.0	Sr		5 48 25. 967	+ . 057	68. 898	− . 042	+23 25 20. 94	+1. 64	15 45. 00	−1. 21
	20.0	Sr		5 52 35. 567	+ . 047	68. 849	− . 091	+23 26 16. 77	+ . 87	15 44. 23	−1. 91
	23.0	Sr		6 5 4. 458	+ . 018	68. 890	− . 050	+23 26 36. 60	+ . 20	15 44. 62	−1. 33
	30.0	Sr		6 34 9. 224	− . 096	68. 780	− . 010	+23 12 57. 82	− . 18	15 44. 66	−1. 05
July	1.0	P		6 38 17. 815	− . 065	68. 865	+ . 105	+23 9 23. 65	+ . 85	15 44. 91	− . 79
	3.0	P		6 46 34. 265	+ . 075	68. 723	+ . 033	+23 0 59. 27	− . 53	15 45. 00	− . 69
Aug.	4.0	Sr		8 54 52. 272	+ . 092	66. 345	− . 045	+17 24 21. 16	+ . 26	15 46. 34	−1. 47
	7.0	Sr		9 6 24. 110	+ . 060	66. 069	− . 071	+16 35 43. 44	+ . 74	15 46. 76	−1. 48
	8.0	Sr		9 10 13. 538	+ . 088	65. 988	− . 062	+16 18 58. 01	+ . 51	15 46. 83	−1. 56
	11.0	M		9 21 38. 165	+ . 085	65. 743	− . 057	+15 27 9. 06	+ . 06	15 47. 30	−1. 55
	12.0	M		9 25 25. 239	+ . 099	65. 648	− . 072	+15 9 22. 13	− . 67	15 47. 47	−1. 54
	14.0	M		9 32 57. 684	+ . 104	65. 514	− . 036	+14 33 7. 71	+ . 81	15 48. 34	−1. 01
	15.0	M		9 36 43. 125	+ . 125	65. 452	− . 018	+14 14 38. 08	+ . 28	15 48. 46	−1. 06
	18.0	M		9 47 56. 248	+ . 078	65. 205	− . 045	+13 17 49. 61	+ . 01	15 49. 18	− . 85
	19.0	M		9 51 39. 674	+ . 114	65. 122	− . 058	+12 58 27. 89	+ . 29	15 48. 89	−1. 32
	21.0	P		9 59 5. 076	+ . 126	65. 057	+ . 017	+12 19 6. 71	+ . 11	15 49. 47	−1. 11
	22.0	P		10 2 47. 064	+ . 124	64. 996	+ . 026	+11 59 8. 07	− . 23	15 51. 07	+ . 30
	26.0	P		10 18				+10 37 23. 64	− . 56	15 50. 86	− . 72
Sept.	8.0	M		11 4 42. 185	+ . 025	64. 106	− . 034	+ 5 55 1. 96	− . 34	15 53. 26	−1. 33
	11.0	M		11 15 29. 613	+ . 113	64. 009	− . 061	+ 4 47 7. 06	+ . 96	15 54. 22	−1. 11
	12.0	M		11 19 5. 102	+ . 092	64. 028	− . 032	+ 4 24 17. 34	+ . 24	15 54. 56	−1. 02
	15.0	P		11 29 51. 089	+ . 049	64. 144	+ . 124	+ 3 15 23. 31	+ . 41	15 55. 98	− . 35
	16.0	P		11 33 26. 399	+ . 099	64. 087	+ . 077	+ 2 52 16. 36	− . 64	15 55. 99	− . 59
	18.0	P		11 40 36. 866	+ . 066	64. 089	+ . 079	+ 2 5 56. 25	+ . 95	15 56. 52	− . 57
	25.0	M		12 5 45. 504	+ . 094	64. 063	− . 027	− 0 37 28. 19	− . 99	15 57. 38	−1. 56
	26.0	M	W	12 9 21. 417	+ . 037	64. 129	+ . 009	− 1 0 51. 11	+ . 09	15 58. 77	− . 44
Oct.	7.0	M	E	12 49 12. 321	+ . 011	64. 646	+ . 056	− 5 16 47. 08	− . 98	16 1. 34	− . 96
	10.0	M		13 0 11. 419	+ . 069	64. 710	− . 060	− 6 25 29. 66	− . 76	16 1. 32	−1. 81
	13.0	P		13 11 14. 573	+ . 023	65. 115	+ . 125	− 7 33 25. 16	+ . 94	16 4. 25	+ . 30
	16.0	P	E	13 22 22. 623	+ . 103	65. 231	+ . 001	− 8 40 28. 67	− . 37	16 3. 22	−1. 53

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Date	Obsr.	Cl.	App. R. A. of Center	Corr. to Am. Eph.	Trans. Semi diam.	Corr. to Am. Eph.	App. Decl. of Center	Corr. to Am. Eph.	Vert. Semi diam.	Corr. to Am. Eph.
1919			h m s	s	s	s	° ′ ″	″	′ ″	″
Oct. 20.0	Sr	E	13 37 21. 507	+0. 077	65. 571	-0. 009	-10 8 7. 21	-0. 01	16 5. 98	+0. 16
27.0	M		14 4 0. 006	+ . 106	66. 242	- . 028	-12 35 32. 08	+ . 72	16 6. 44	-1. 24
28.0	M		14 7 51. 165	+ . 085	66. 364	- . 016	-12 55 53. 83	-1. 13	16 5. 96	-1. 99
Nov. 6.0	P		14 43 6. 167	+ . 117	67. 412	+ . 002	-15 48 57. 35	- . 45	16 11. 60	+1. 36
10.0	P		14 59				-16 59 19. 76	- . 06	16 11. 56	+ . 38
13.0	P		15 11 17. 000	+ . 110	68. 265	+ . 015	-17 49 7. 48	-1. 08	16 12. 08	+ . 25
14.0	P		15 15 22. 033	+ . 143	68. 405	+ . 035	-18 5 4. 47	+1. 03	16 13. 21	+1. 17
17.0	Sr		15 27 42. 242	+ . 102	68. 660	- . 060	-18 51 7. 87	- . 07	16 11. 21	-1. 45
18.0	Sr		15 31 50. 712	+ . 112	68. 763	- . 067	-19 5 49. 73	- . 83	16 11. 41	-1. 45
20.0	P		15 40 10. 088	+ . 008	69. 108	+ . 048	-19 34 9. 46	- . 36	16 13. 14	- . 12
21.0	Sr		15 44 21. 187	+ . 127	69. 106	- . 064	-19 47 46. 87	+ . 73	16 11. 90	-1. 56
24.0	P	E	15 56 59. 039	+ . 189	69. 586	+ . 086	-20 26			
Dec. 16.0	Bn	W	17 32 33. 718	+ . 008	71. 185	+ . 045	-23 17 53. 43	- . 03	16 14. 36	-2. 73
22.0	Bn		17 59 11. 661	- . 059	71. 192	- . 058	-23 26 51. 38	+ . 42	16 16. 82	- . 68
30.0	Bn		18 34 43. 130	+ . 080	71. 129	- . 011	-23 12 27. 95	+ . 55	16 16. 64	-1. 21
1920										
Jan. 2.0	Bn		18 47 59. 023	- . 027	71. 048	+ . 018	-22 59 20. 51	+2. 19	16 17. 44	- . 46
12.0	Bn		19 31 46. 294	+ . 074	70. 371	- . 019	-21 46 21. 96	+ . 84	16 16. 51	-1. 15
29.0	Ry		20 43 49. 401	+ . 061	68. 679	+ . 009	-18 8 13. 22	- . 22	16 14. 01	-2. 13
30.0	Ry		20 47 56. 689	+ . 119	68. 545	- . 015	-17 52 8. 83	+ . 87	16 15. 69	- . 32
Feb. 10.0	Ry		21 32 21. 504	- . 116	67. 207	- . 093	-14 35 59. 49	+1. 21	16 12. 91	-1. 36
19.0	Ry		22 7 32. 591	+ . 051	66. 390	+ . 040	-11 33 4. 68	+ . 72	16 11. 45	-1. 02
20.0	Ry		22 11 23. 584	+ . 064	66. 246	- . 004	-11 11 44. 74	+1. 16	16 11. 42	- . 84
26.0	Ry		22 34 15. 707	+ . 017	65. 735	+ . 025	- 9 0 23. 50	+ . 90	16 9. 63	-1. 31
27.0	Ry		22 38 2. 269	+ . 059	65. 654	+ . 034	- 8 37 59. 66	+ . 94	16 9. 85	- . 86
Mar. 1.0	M		22 49 18. 419	+ . 049	65. 398	- . 002	- 7 30 5. 71	+ . 29	16 8. 34	-1. 68
2.0	M		22 53 2. 849	+ . 159	65. 246	- . 084	- 7 7 14. 08	+ . 52	16 8. 00	-1. 78
8.0	Bn		23 15 18. 877	- . 063	64. 940	. 000	- 4 48 12. 44	+ . 06	16 7. 04	-1. 22
9.0	Bn		23 19 0. 234	- . 026	64. 799	- . 091	- 4 24 47. 78	-1. 09	16 4. 81	-3. 19
15.0	P		23 41 1. 851	+ . 061	64. 613	- . 017	- 2 3 12. 62	+ . 58	16 5. 14	-1. 24
18.0	P		23 51 59. 520	+ . 140	64. 600	+ . 060	- 0 52 5. 71	- . 01	16 6. 16	+ . 60
22.0	Ry		0 6 33. 943	- . 007	64. 478	+ . 008	+ 0 42 44. 82	+2. 22	16 3. 84	- . 63
23.0	Ry		0 10 12. 289	- . 031	64. 428	- . 032	+ 1 6 21. 23	- . 47	16 2. 40	-1. 80
25.0	Ry	W	0 17 28. 829	+ . 009	64. 366	- . 074	+ 1 53 34. 90	+ . 80	16 1. 80	-1. 86
Apr. 6.0	Bn	E	1 1 9. 870	- . 030	64. 632	+ . 022	+ 6 31 32. 68	+ . 88	15 58. 64	-1. 73
13.0	P		1 26 50. 721	+ . 141	64. 937	+ . 057	+ 9 6 55. 60	+ . 20	15 59. 22	+ . 80
15.0	P		1 34				+ 9 50 4. 05	+ . 74	15 58. 02	+ . 15
19.0	Ry		1 49 4. 141	+ . 001	65. 268	+ . 068	+11 14 19. 32	- . 68	15 57. 15	+ . 34
22.0	Ry		2 0 16. 408	+ . 088	65. 418	+ . 028	+12 15 37. 24	+ . 24	15 55. 04	-1. 01
23.0	Ry		2 4 1. 318	+ . 068	65. 521	+ . 071	+12 35 38. 96	+ . 06	15 55. 68	- . 12
29.0	M		2 26 40. 446	- . 054	65. 867	- . 033	+14 31 18. 48	+1. 48	15 53. 22	-1. 12
May 3.0	Bn		2 41 56. 698	- . 062	66. 157	- . 053	+15 43 40. 42	+1. 02	15 53. 47	+ . 07
4.0	Bn		2 46				+16 1 7. 96	+1. 16	15 51. 88	-1. 29
6.0	Bn		2 53 29. 733	+ . 003	66. 394	- . 056	+16 35 16. 73	+3. 03	15 52. 12	- . 59
11.0	P		3 12 56. 334	+ . 034	66. 838	- . 022	+17 55 37. 51	+ . 21	15 51. 58	- . 01
17.0	Ry		3 36 35. 718	+ . 008	67. 328	- . 012	+19 22 9. 45	- . 15	15 48. 56	-1. 80
27.0	M		4 16 45. 240	+ . 080	67. 995	- . 085	+21 20			
June 1.0	Bn		4 37 7. 617	- . 023	68. 319	- . 071	+22 4 52. 66	- . 34	15 47. 13	- . 81
3.0	Bn		4 45 19. 501	+ . 001	68. 416	- . 074	+22 20 17. 62	+ . 12	15 46. 24	-1. 43
7.0	P		5 1 47. 619	+ . 059	68. 698	+ . 018	+22 46 25. 53	+1. 13	15 46. 72	- . 45
8.0	P		5 5 55. 461	+ . 081	68. 669	- . 051	+22 51 55. 90	- . 70	15 46. 13	- . 93
10.0	P		5 14 11. 910	+ . 040	68. 758	- . 032	+23 1 50. 08	+1. 68	15 46. 24	- . 60
11.0	P		5 18 20. 602	+ . 102	68. 819	- . 001	+23 6 7. 81	- . 19	15 45. 73	-1. 00
24.0	M		6 12 23. 328	- . 002	68. 854	- . 066	+23 25 1. 59	+ . 49	15 45. 31	- . 54
25.0	M		6 16 32. 662	+ . 012	68. 814	- . 086	+23 24			
29.0	Bn	E	6 33 8. 404	+ . 064	68. 764	- . 036	+23 13 43. 93	- . 57	15 44. 96	- . 78

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1920			h m s	s	s	s	° ′ ″	″	′ ″	″
July 1.0	Bn	E	6 41 24.958	+0.008	68.668	−0.072	+23 6 23.16	+0.56	15 45.73	+0.02
9.0	Ry		7 14 19.785	+ .035	68.356	− .004	+22 20 54.83	+ .93	15 44.94	− .80
14.0	Ry		7 34 41.851	+ .071	68.000	− .050	+21 39 50.43	− .37	15 44.06	−1.85
16.0	Bn		7 42 47.304	− .026	67.835	− .065	+21 20 49.46	+ .66	15.45.06	− .95
19.0	M		7 54 51.798	+ .068	67.611	− .069	+20 49 33.75	+ .45	15 44.92	−1.29
21.0	Bn		8 3				+20 26 57.66	+ .16	15 45.54	− .83
23.0	Ry		8 10 49.671	+ .041	67.332	− .028	+20 2 59.40	− .30	15 45.56	− .99
26.0	M		8 22 41.824	+ .014	67.036	− .074	+19 24 33.42	− .08	15 45.04	−1.80
28.0	Bn		8 30 33.552	− .008	66.851	− .089	+18 57 19.07	− .13	15 45.76	−1.30
30.0	Ry	E	8 38 22.969	+ .129	66.705	− .055	+18 28 50.28	+ .08	15 45.72	−1.57
Aug. 30.0	M	W	10 34 51.675	+ .075	64.434	− .026	+ 8 56 51.70	− .20	15 51.58	−1.10
Sept. 1.0	Bn		10 42 7.208	− .092	64.310	− .050	+ 8 13 34.14	+ .34	15 52.64	− .48
3.0	Ry		10 49 21.888	+ .028	64.305	+ .025	+ 7 29 42.70	− .90	15 53.72	+ .14
8.0	Bn		11 7 24.386	+ .046	64.049	− .071	+ 5 38 3.79	− .91	15 53.16	−1.59
13.0	M		11 25 23.046	+ .076	63.984	− .046	+ 3 44 2.21	− .29	15 54.38	−1.61
15.0	Ry		11 32 33.835	+ .065	64.016	+ .006	+ 2 57 54.95	− .25	15 54.85	−1.66
17.0	P		11 39 44.431	+ .041	64.067	+ .057	+ 2 11 35.47	+ .47	15 56.80	− .24
20.0	M		11 50 30.430	+ .120	63.950	− .070	+ 1 1 45.06	− .64	15 56.36	−1.49
22.0	Ry		11 57 41.256	+ .106	64.013	− .037	+ 0 15 3.14	−1.06	15 57.17	−1.23
24.0	P		12 4 52.489	+ .129	64.183	+ .093	− 0 31 40.87	+ .23	15 57.98	− .97
29.0	Ry		12 22 53.324	+ .124	64.242	+ .002	− 2 28 33.71	− .51	15 58.90	−1.42
Oct. 5.0	M		12 44 39.071	+ .091	64.412	− .108	− 4 47 59.29	− .19	16 0.53	−1.41
7.0	M		12 51 57.228	+ .068	64.604	− .026	− 5 34 3.31	+ .49	16 1.13	−1.36
13.0	Bn		13 14 2.603	+ .063	64.962	− .088	− 7 50 24.46	+ .34	16 3.34	− .79
14.0	Bn		13 17 45.217	+ .037	65.099	− .031	− 8 12 48.94	−1.24	16 2.84	−1.57
15.0	Bn		13 21 28.464	+ .104	65.157	− .053	− 8 35 4.81	−1.11	16 4.24	− .45
21.0	P		13 43 59.610	+ .070	65.735	− .015	−10 45 51.39	+ .31	16 5.35	−1.00
22.0	P		13 47 47.055	+ .145	65.871	+ .031	−11 7 8.03	+ .17	16 6.28	− .34
25.0	Ry		13 59 13.137	+ .077	66.137	− .013	−12 9 55.25	+ .45	16 5.84	−1.59
26.0	Ry		14 3 3.258	+ .078	66.215	− .035	−12 30 29.66	− .06	16 6.02	−1.67
29.0	Ry		14 14 38.082	+ .072	66.567	− .013	−13 31 0.74	− .44	16 7.82	− .64
Nov. 4.0	M		14 38				−15 26 5.55	+ .95	16 8.48	−1.44
5.0	M		14 42 7.277	+ .087	67.301	− .079	−15 44 26.51	+ .29	16 8.29	−1.87
8.0	Bn		14 54 6.646	+ .046	67.674	− .066	−16 37 51.98	+ .42	16 8.61	−2.24
18.0	P		15 34 59.797	+ .087	68.992	+ .072	−19 16 39.97	+ .63	16 14.21	+1.16
19.0	P		15 39 9.636	+ .066	68.990	− .040	−19 30 45.81	− .51	16 11.26	−2.00
23.0	Ry	W	15 55 57.027	+ .047	69.518	+ .038	−20 23 28.67	− .37	16 13.26	− .79
Dec. 29.0	Bn	E	18 33 37.278	− .032	71.118	− .032	−23 13 20.10	+ .40	16 16.04	−1.81
1921										
Jan. 17.0	P		19 56 34.138	− .012	69.842	− .038	−20 44 50.81	+ .29	16 16.70	− .59
21.0	Ry		20 13 33.699	− .001	69.471	+ .001	−19 54 23.09	+2.11	16 15.08	−1.89
24.0	Ry		20 26 10.245	− .005	69.170	+ .020	−19 12 41.64	− .54	16 16.36	− .30
25.0	Ry		20 30 20.830	− .020	69.066	+ .026	−18 58 3.38	+ .12	16 17.78	+1.24
27.0	P		20 38 39.667	− .013	68.903	+ .093	−18 27 45.94	+ .26	16 14.90	−1.39
28.0	Bn		20 42 47.881	− .019	68.660	− .040	−18 12 4.82	+2.38	16 15.90	− .26
Feb. 3.0	P		21 7 20.411	+ .031	68.028	+ .018	−16 31 31.70	+2.10	16 14.98	− .30
4.0	Ry		21 11 23.070	+ .100	67.865	− .025	−16 13 43.79	+1.61	16 13.96	−1.16
14.0	Bn		21 51 4.978	− .002	66.732	− .058	−13 1 24.73	+1.57	16 11.69	−1.66
15.0	Bn		21 54 58.945	+ .055	66.543	− .137	−12 40 56.23	+ .17	16 13.34	+ .18
17.0	P		22 2 44.434	− .046	66.560	+ .080	−11 59 18.72	+1.68	16 12.72	− .05
18.0	Ry		22 6 36.142	− .048	66.467	+ .087	−11 38 14.53	+ .87	16 12.76	+ .19
28.0	Bn		22 44 37.604	+ .024	65.401	− .079	− 7 58 26.76	+1.04	16 8.48	−1.81
Mar. 1.0	Bn		22 48 22.579	− .001	65.392	− .018	− 7 35 42.66	+1.34	16 9.44	− .61
8.0	Ry		23 14 24.875	+ .075	64.937	− .013	− 4 53 52.98	+1.32	16 7.42	− .84
10.0	P	E	23 21 47.571	+ .031	64.970	+ .120	− 4 6 58.89	+ .91	16 8.02	+ .27

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1921			h m s	s	s	s	° ′ ″	″	′ ″	″
Mar. 11.0	Bn	E	23 25 28.436	+0.046	64.777	−0.023	− 3 43 26.55	+1.25	16 6.96	−0.53
14.0	Bn		23 36 29.149	+ .079	64.589	− .081	− 2 32 37.08	+ .72	16 5.34	−1.37
15.0	Bn		23 40 8.765	+ .045	64.607	− .023	− 2 8 56.60	+1.00	16 5.60	− .85
17.0	P		23 47 27.364	+ .074	64.577	+ .007	− 1 21 34.10	+ .40	16 5.28	− .64
18.0	Ry		23 51 6.226	− .024	64.516	− .034	− 0 57 52.01	+ .19	16 4.82	− .84
21.0	Ry		0 2 2.050	+ .030	64.436	− .054	+ 0 13 12.99	− .01	16 3.34	−1.51
25.0	Bn	E	0 16 34.780	− .020	64.416	− .024	+ 1 47 44.55	+ .55	16 1.92	−1.84
Apr. 11.0	Bn	W	1 18 35.617	+ .047	64.748	− .032	+ 8 17 49.28	− .22	15 58.92	− .09
12.0	Bn		1 22 16.238	+ .028	64.797	− .023	+ 8 39 48.55	+ .55	15 58.05	− .70
14.0	P		1 29 38.328	− .022	64.860	− .050	+ 9 23 19.28	+ .88	15 56.02	−2.20
15.0	Ry		1 33				+ 9 44 50.22	+ .52	15 56.96	−1.00
19.0	Ry		1 48 9.476	− .054	65.206	+ .016	+11 9 13.86	− .14	15 57.39	+ .47
21.0	P		1 55 36.690	.000	65.332	+ .022	+11 50			
22.0	Bn		1 59 20.947	+ .037	65.308	− .062	+12 10 38.40	+ .70	15 53.82	−2.33
25.0	Bn		2 10 36.343	+ .023	65.463	− .117	+13 10 13.29	− .21	15 53.53	−1.85
28.0	P		2 21 56.189	− .001	65.854	+ .054	+14 7 53.03	− .07	15 53.30	−1.33
May 9.0	Bn		3 4 11.283	+ .043	66.621	− .049	+17 20 23.98	− .12	15 51.76	− .29
10.0	Bn		3 8 5.118	+ .018	66.672	− .078	+17 36 16.20	.00	15 50.46	−1.38
17.0	Ry		3 35 37.631	− .069	67.380	+ .050	+19 18 50.43	+ .53	15 51.08	+ .63
19.0	P		3 43 34.837	+ .017	67.519	+ .039	+19 45 15.82	+ .52	15 48.61	−1.47
20.0	Bn		3 47 34.229	+ .039	67.556	− .004	+19 57 58.13	+ .33	15 49.84	− .06
23.0	Bn		3 59 35.678	+ .138	67.699	− .081	+20 34 1.96	− .14	15 47.92	−1.45
31.0	Ry		4 32 1.643	− .017	68.339	+ .029	+21 54 27.57	+ .17	15 47.64	− .44
June 2.0	P		4 40 12.907	+ .067	68.510	+ .080	+22 10 50.34	+ .74	15 47.48	− .32
3.0	Bn		4 44 19.131	+ .081	68.439	− .041	+22 18 26.31	+ .31	15 46.66	−1.00
10.0	Ry		5 13 11.833	+ .003	68.707	− .073	+23 0 38.96	+ .26	15 46.84	− .02
13.0	Ry		5 25 38.167	+ .047	68.842	− .018	+23 12 42.86	+ .56	15 45.46	−1.13
14.0	Ry		5 29 47.191	− .009	68.866	− .014	+23 15 55.10	+ .50	15 44.76	−1.75
16.0	P		5 38 5.777	+ .057	68.882	− .028	+23 21			
20.0	P		5 54 43.591	+ .021	68.936	− .004	+23 26 29.00	− .50	15 45.74	− .36
24.0	Ry		6 11				+23 25 16.68	− .32	15 44.96	− .93
27.0	Ry		6 23 49.210	+ .070	68.871	+ .011	+23 20 2.50	.00	15 45.56	− .21
July 18.0	Ry		7 49 51.911	+ .111	67.771	+ .001	+21 2 54.51	+ .91	15 46.52	+ .33
25.0	Bn		8 17 46.502	+ .112	67.169	− .041	+19 40 50.61	− .99	15 46.04	− .70
27.0	Ry		8 25 39.807	+ .067	67.011	− .029	+19 14 24.55	+ .15	15 46.23	− .69
Aug. 1.0	Ry		8 45 12.958	+ .058	66.606	− .004	+18 2 44.88	−1.52	15 47.56	+ .09
5.0	P		9 0 40.899	+ .169	66.236	− .024	+17 0 7.26	− .24	15 46.74	−1.25
8.0	Bn		9 12 10.269	+ .039	65.956	− .044	+16 10 13.90	− .50	15 46.76	−1.68
10.0	Ry		9 20				+15 35 41.68	+ .78	15 48.34	− .42
19.0	P		9 53 33.515	− .035	65.198	+ .048	+12 48 25.25	−1.05	15 49.95	− .42
22.0	Ry		10 4 39.883	+ .003	64.906	− .034	+11 48 50.50	− .40	15 51.24	+ .30
24.0	Ry		10 12 1.945	+ .055	64.763	− .047	+11 8 10.60	+ .20	15 50.98	− .36
26.0	Ry		10 19 22.232	− .018	64.691	+ .011	+10 26 46.68	− .52	15 52.80	+1.06
31.0	Ry		10 37 36.880	+ .020	64.409	− .011	+ 8 40 28.42	− .98	15 52.76	− .06
Sept. 2.0	Bn		10 44 52.587	+ .117	64.283	− .047	+ 7 56 54.48	−2.72	15 52.16	−1.11
7.0	Ry		11 2 56.743	+ .023	64.181	+ .031	+ 6 5 58.88	+ .08	15 54.72	+ .25
9.0	Bn		11 10 9.008	+ .178	64.030	− .080	+ 5 20 50.21	− .99	15 53.98	−1.00
13.0	Bn		11 24 31.212	+ .042	63.972	− .068	+ 3 49 32.09	−2.51	15 56.46	+ .45
15.0	P		11 31 41.740	+ .020	64.010	− .010	+ 3 3 29.81	− .89	15 56.35	− .18
16.0	Ry		11 35 16.982	+ .072	63.978	− .032	+ 2 40 22.63	− .77	15 56.16	− .63
19.0	Ry		11 46 2.444	− .036	64.075	+ .055	+ 1 30 41.69	−2.41	15 58.99	+1.42
20.0	Ry		11 49 37.827	+ .087	63.952	− .068	+ 1 7 26.12	− .18	15 57.02	− .81
22.0	P		11 56 48.621	+ .121	64.124	+ .074	+ 0 20 45.46	+ .06	15 59.95	+1.59
23.0	Bn		12 0				− 0 2 37.23	− .33	15 56.99	−1.63
29.0	P	W	12 22 1.146	+ .116	64.254	+ .024	− 2 22 57.31	− .91	15 59.42	− .80

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Date	Obsr.	Cl.	App. R. A. of Center	Corr. to Am. Eph.	Trans. Semi diam.	Corr. to Am. Eph.	App. Decl. of Center	Corr. to Am. Eph.	Vert. Semi diam.	Corr. to Am. Eph.
1921			h m s	s	s	s	° ′ ″	″	′ ″	″
Oct. 4.0	Ry	W	12 40 8.799	+0.089	64.508	+0.058	− 4 19 21.42	−1.12	16 1.53	−0.07
6.0	P		12 47 26.097	+ .087	64.601	+ .041	− 5 5 35.37	−1.07	16 1.24	− .92
7.0	Bn	W	12 51 5.206	− .014	64.567	− .053	− 5 28 36.89	−1.19	16 0.54	−1.90
17.0	Ry	E	13 28 2.195	+ .105	65.285	− .075	− 9 13 54.02	+ .28	16 4.90	− .33
18.0	Ry		13 31 46.883	+ .173	65.427	− .023	− 9 35 47.11	+1.49	16 5.61	+ .11
20.0	P		13 39 17.918	+ .088	65.620	− .010	−10 19 11.24	+ .66	16 4.94	−1.10
21.0	Bn		13 43 4.417	+ .047	65.645	− .085	−10 40 39.74	+ .46	16 5.52	− .78
24.0	Bn		13 54 28.214	+ .094	65.973	− .047	−11 44 6.16	+ .64	16 5.87	−1.21
25.0	Bn		13 58 17.582	+ .122	66.061	− .059	−12 4 54.86	+ .14	16 6.34	− .99
27.0	P		14 5 58.470	+ .080	66.300	− .030	−12 45 57.30	+ .60	16 6.89	− .95
28.0	Ry		14 9 50.098	+ .118	66.430	− .010	−13 6 11.59	+ .11	16 7.22	− .88
Nov. 4.0	Bn		14 37 13.080	+ .060	67.189	− .051	−15 21 42.47	− .57	16 9.01	− .85
8.0	Bn		14 53 9.644	+ .074	67.629	− .081	−16 33 41.97	+ .83	16 8.18	−2.65
15.0	Ry		15 21 35.645	+ .155	68.540	− .010	−18 28 40.80	+ .40	16 12.70	+ .29
22.0.	Bn		15 50 42.709	− .011	69.331	− .009	−20 7 42.69	− .29	16 12.56	−1.23
25.0	Ry		16 3 24.044	+ .124	69.644	− .016	−20 44 43.51	+ .49	16 14.16	− .16
Dec. 1.0	P		16 29 6.709	+ .139	70.222	− .018	−21 48 12.38	+ .32	16 15.56	+ .26
15.0	P		17 30 25.573	+ .113	71.109	− .021	−23 16 20.31	+1.49	16 17.62	+ .55
20.0	Bn	E	17 52 35.702	+ .102	71.123	− .117	−23 26 8.90	+ .30	16 15.54	−1.89
1922										
Jan. 9.0	Ry	W	19 20 58.400	− .010	70.606	+ .026	−22 8 32.60	+ .10	16 19.08	+1.34
10.0	Ry		19 25 19.742	+ .082	70.422	− .078	−21 59 56.50	−1.80	16 18.29	+ .58
13.0	Bn		19 38 19.943	+ .083	70.195	− .065	−21 31 25.49	+1.91	16 15.71	−1.87
24.0	Ry		20 25 9.094	+ .034	69.120	− .050	−19 16 7.92	+ .98	16 15.14	−1.47
26.0	P		20 33 30.337	+ .157	69.024	+ .074	−18 46 40.15	+1.95	16 16.95	+ .58
30.0	Bn		20 50 2.866	+ .146	68.443	− .047	−17 43 44.91	+ .69	16 14.37	−1.50
31.0	Bn		20 54 9.003	+ .213	68.374	− .006	−17 27 11.93	+1.27	16 14.63	−1.10
Feb. 3.0	Ry		21 6 22.093	+ .093	68.038	+ .008	−16 35 45.84	+1.06	16 15.00	− .31
23.0	P		22 24 48.581	+ .071	65.929	+ .009	− 9 55 35.21	+ .29	16 10.94	− .52
Mar. 3.0	Ry		22 54 57.034	+ .004	65.274	− .016	− 6 55 30.42	− .22	16 9.40	− .19
6.0	Ry		23 6 6.767	+ .077	65.077	− .013	− 5 46 10.75	+1.05	16 8.54	− .32
13.0	Bn		23 31 54.877	+ .047	64.671	− .059	− 3 2 4.74	+1.06	16 5.54	−1.53
16.0	P		23 42 53.615	− .015	64.623	+ .013	− 1 51 8.22	+ .28	16 6.50	+ .23
17.0	Ry		23 46 32.765	− .025	64.625	+ .045	− 1 27 25.50	+1.40	16 6.78	+ .78
23.0	P		0 8 24.656	+ .046	64.482	+ .022	+ 0 54 42.90	+ .60	16 3.07	−1.26
24.0	Bn	W	0 12 3.030	+ .110	64.376	− .074	+ 1 18 20.86	+ .36	16 2.80	−1.25
Apr. 13.0	P	E	1 25 2.445	+ .065	64.789	− .071	+ 8 56 14.74	+ .14	15 57.76	− .84
20.0	P		1 50 57.588	+ .038	65.191	− .039	+11 24 47.99	+ .39	15 56.15	− .56
24.0	Bn		2 5 55.528	+ .008	65.445	− .045	+12 45 43.21	+1.01	15 54.86	− .80
25.0	Bn		2 9 41.203	+ .023	65.585	+ .025	+13 5 25.82	+ .42	15 54.24	−1.17
27.0	P		2 17 13.995	+ .015	65.726	+ .026	+13 44 12.86	+ .16	15 54.19	− .72
28.0	Ry		2 21 1.098	− .022	65.758	− .022	+14 3 16.60	+ .30	15 54.53	− .14
May 1.0	Ry		2 32 25.643	+ .033	66.004	− .006	+14 59 3.97	+1.47	15 54.31	+ .36
2.0	Ry		2 36 14.863	+ .063	66.015	− .075	+15 17 10.78	+2.18	15 53.44	− .28
5.0	Bn		2 47 45.587	+ .007	66.244	− .086	+16 9 54.90	+ .40	15 50.90	−2.14
8.0	Bn		2 59 21.219	+ .019	66.487	− .083	+17 0 14.91	− .29	15 52.13	− .26
9.0	Bn		3 3 14.241	+ .061	66.610	− .050	+17 16 28.77	+ .37	15 49.18	−3.00
11.0	P		3 11 1.927	+ .067	66.835	+ .015	+17 48 2.94	+ .14	15 50.84	− .91
15.0	Ry		3 26 44.222	+ .042	67.172	+ .022	+18 47 36.90	+2.10	15 51.38	+ .47
16.0	Ry		3 30 41.253	+ .023	67.228	− .002	+19 1 41.97	+ .87	15 51.23	+ .52
19.0	Bn		3 42 35.832	− .018	67.423	− .037	+19 42 3.63	+ .33	15 48.46	−1.66
22.0	Bn		3 54 35.667	+ .057	67.664	− .026	+20 19 26.01	+ .91	15 48.88	− .68
25.0	P		4 6 40.327	+ .047	67.912	+ .012	+20 53 39.66	− .14	15 48.42	− .62
29.0	Ry		4 22 53.555	+ .055	68.198	+ .018	+21 34 17.65	+ .95	15 48.26	− .15
June 6.0	Bn	E	4 55 40.007	+ .107	68.550	− .060	+22 37 22.55	− .15	15 45.17	−2.20

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1922			h m s	s	s	s	° ′ ″	″	′ ″	″
June 8.0	P	E	5 3 54. 893	+0. 043	68. 630	-0. 070	+22 49 14. 08	-0. 22	15 45. 79	-1. 36
12.0	Ry		5 20 27. 984	+ . 054	68. 807	- . 023	+23 8 9. 01	+ . 81	15 46. 33	- . 40
15.0	Bn		5 32 54. 951	+ . 001	68. 804	- . 086	+23 18 3. 33	+ . 93	15 45. 20	-1. 25
16.0	Bn	E	5 37 4. 351	+ . 081	68. 836	- . 074	+23 20 31. 75	+ . 55	15 44. 98	-1. 39
22.0	P	W	6 2 1. 970	+ . 090	68. 899	- . 041	+23 26 44. 99	+ . 69	15 45. 41	- . 54
23.0	Ry		6 6 11. 488	- . 042	68. 931	+ . 001	+23 26 18. 36	-1. 34	15 46. 55	+ . 65
26.0	Ry		6 18 40. 026	- . 014	68. 926	+ . 036	+23 22 37. 58	+ . 08	15 46. 24	+ . 46
30.0	Ry		6 35 15. 985	+ . 055	68. 794	+ . 014	+23 11 55. 64	- . 76	15 45. 85	+ . 15
July 3.0	Bn		6 47 40. 390	+ . 040	68. 646	- . 034	+22 59 40. 15	+ . 75	15 44. 06	-1. 63
6.0	P		7 0 1. 965	- . 025	68. 543	- . 007	+22 43 46. 33	+ . 23	15 45. 28	- . 43
7.0	Ry		7 4 8. 500	- . 010	68. 449	- . 051	+22 37 40. 97	+ . 27	15 45. 28	- . 45
13.0	Ry		7 28 39. 358	+ . 108	68. 122	- . 028	+21 52 59. 92	- . 18	15 44. 73	-1. 17
17.0	P		7 45				+21 15 40. 93	+ . 33	15 44. 94	-1. 13
18.0	Bn		7 48 52. 537	+ . 047	67. 686	- . 104	+21 5			
21.0	Ry		8 0 54. 371	+ . 011	67. 571	+ . 021	+20 32 33. 30	- . 90	15 46. 44	+ . 11
24.0	P		8 12 51. 368	+ . 098	67. 293	- . 017	+19 56 34. 91	-1. 09	15 45. 38	-1. 19
28.0	Ry		8 28 38. 971	+ . 041	66. 956	- . 024	+19 3 59. 13	-1. 47	15 46. 68	- . 29
31.0	P		8 40 23. 298	+ . 108	66. 754	+ . 034	+18 21 15. 59	- . 01	15 46. 81	- . 52
Aug. 3.0	P		8 52 1. 852	+ . 042	66. 495	+ . 035	+17 35 48. 94	+ . 44	15 47. 86	+ . 14
4.0	Ry	W	8 55 53. 503	+ . 063	66. 294	- . 076	+17 20 4. 46	- . 44	15 48. 17	- . 31
18.0	Ry	E	9 48 55. 629	+ . 099	65. 217	- . 013	+13 12 37. 53	- . 17	15 49. 26	- . 81
21.0	P		10 0 4. 167	+ . 097	65. 001	- . 019	+12 13 45. 84	+ . 64	15 51. 15	+ . 52
22.0	P		10 3 46. 054	+ . 064	64. 897	- . 053	+11 53 43. 78	- . 12	15 50. 54	- . 29
24.0	P		10 11 8. 494	+ . 024	64. 773	- . 047	+11 13 7. 87	+ . 07	15 50. 10	-1. 13
28.0	P		10 25 48. 339	+ . 079	64. 575	- . 005	+ 9 49 50. 38	- . 52	15 51. 18	- . 92
29.0	Bn		10 29 27. 311	+ . 111	64. 444	- . 086	+ 9 28 37. 89	+ . 29	15 52. 11	- . 21
31.0	Bn		10 36 44. 127	+ . 127	64. 420	- . 010	+ 8 45 44. 01	- . 39	15 51. 73	-1. 05
Sept. 5.0	Bn		10 54 50. 481	+ . 051	64. 148	- . 082	+ 6 56 10. 66	+ . 06	15 52. 87	-1. 09
7.0	Bn		11 2 3. 308	+ . 088	64. 096	- . 074	+ 6 11 31. 68	+ . 28	15 53. 25	-1. 19
11.0	Ry		11 16 26. 733	+ . 093	63. 989	- . 081	+ 4 41 1. 33	+ . 03	15 54. 64	- . 77
12.0	P		11 20				+ 4 18 10. 72	+ . 02	15 54. 46	-1. 19
14.0	P		11 27 13. 058	+ . 048	64. 045	+ . 015	+ 3 32 16. 49	+ . 29	15 55. 76	- . 39
15.0	Ry		11 30 48. 452	+ . 102	63. 966	- . 054	+ 3 9 13. 78	+ . 98	15 55. 88	- . 52
18.0	Ry		11 41 34. 442	+ . 132	64. 009	- . 001	+ 1 59 42. 63	+ . 33	15 57. 74	+ . 57
25.0	Ry		12 6 43. 295	+ . 035	64. 143	+ . 043	- 0 43 40. 97	+1. 33	15 59. 52	+ . 47
26.0	P		12 10 19. 407	+ . 157	64. 125	- . 005	- 1 7 5. 69	+ . 41	15 59. 28	- . 05
28.0	P		12 17 31. 862	+ . 112	64. 247	+ . 057	- 1 53 52. 69	- . 19	15 59. 24	- . 65
29.0	Ry		12 21 8. 406	+ . 116	64. 152	- . 068	- 2 17 13. 90	+ . 50	15 59. 72	- . 45
Oct. 3.0	Ry		12 35 37. 084	+ . 134	64. 369	- . 021	- 3 50 26. 14	- . 74	16 1. 07	- . 22
5.0	P		12 42 53. 212	+ . 122	64. 494	+ . 004	- 4 36 46. 87	- . 67	16 0. 20	-1. 65
12.0	P		13 8 32. 316	+ . 106	64. 960	+ . 020	- 7 16 54. 75	- . 65	16 3. 69	- . 07
13.0	Ry		13 12 14. 005	+ . 025	64. 998	- . 012	- 7 39 26. 31	- . 21	16 5. 62	+1. 59
16.0	Ry		13 23 22. 696	+ . 096	65. 330	+ . 080	- 8 46 22. 25	+ . 75	16 3. 05	-1. 79
19.0	P		13 34 36. 682	+ . 162	65. 594	+ . 084	- 9 52 12. 20	+1. 30	16 5. 63	- . 01
20.0	Bn		13 38 22. 481	+ . 071	65. 564	- . 036	-10 13 53. 18	+ . 42	16 4. 08	-1. 83
27.0	Ry		14 5 2. 184	+ . 044	66. 291	- . 019	-12 40 58. 62	+ . 78	16 7. 70	- . 10
30.0	Ry		14 16 38. 426	+ . 086	66. 687	+ . 057	-13 41 12. 69	- . 79	16 8. 70	+ . 11
31.0	Ry		14 20 31. 973	+ . 063	66. 768	+ . 018	-14 0 49. 88	+ . 52	16 10. 52	+1. 68
Nov. 9.0	P		14 56 10. 521	+ . 141	67. 789	- . 011	-16 46 43. 34	+ . 66	16 11. 14	+ . 12
10.0	Ry		15 0 12. 205	+ . 005	67. 986	+ . 066	-17 3 49. 38	+ . 72	16 11. 98	+ . 74
13.0	Ry		15 12 23. 025	+ . 135	68. 219	- . 061	-17 53 22. 82	- . 42	16 12. 20	+ . 31
14.0	Ry		15 16 28. 208	+ . 018	68. 340	- . 060	-18 9 15. 93	+ . 57	16 12. 01	- . 09
16.0	P		15 24 41. 561	+ . 141	68. 676	+ . 046	-18 40 8. 56	-1. 46	16 11. 51	-1. 01
17.0	Bn		15 28 49. 270	- . 040	68. 710	- . 040	-18 55 2. 17	+ . 83	16 12. 62	- . 10
20.0	Bn	E	15 41 18. 158	+ . 128	69. 022	- . 068	-19 37 48. 13	- . 33	16 13. 24	- . 09

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1922			h m s	s	s	s	° ′ ″	″	′ ″	″
Nov. 21.0	Bn	E	15 45 29. 385	+0. 155	69. 150	−0. 050	−19 51 20. 86	−0. 36	16 13. 40	−0. 13
23.0	Ry		15 53 54. 104	+ . 074	69. 451	+ . 031	−20 17 19. 99	+ . 41	16 13. 47	− . 45
24.0	Ry		15 58 7. 698	+ . 118	69. 549	+ . 019	−20 29 45. 80	+1. 00	16 15. 40	+1. 29
Dec. 5.0	Bn		16 45 23. 223	+ . 163	70. 556	+ . 006	−22 20 20. 25	− . 25	16 14. 78	−1. 14
18.0	Bn		17 42 38. 010	+ . 160	71. 201	+ . 011	−23 23 9. 03	+1. 57	16 15. 52	−1. 74
21.0	P	E	17 55 57. 337	+ . 037	71. 268	+ . 028	−23 26 35. 53	− . 23	16 16. 90	− . 57
1923										
Jan. 11.0	P	W	19 28 36. 084	+ . 144	70. 502	+ . 052	−21 53 4. 81	+1. 29	16 16. 22	−1. 45
12.0	Bn		19 32 56. 374	+ . 054	70. 365	− . 005	−21 43 42. 35	+ . 35	16 16. 84	− . 78
19.0	Ry		20 3 1. 274	+ . 094	69. 623	− . 097	−20 26 26. 63	+ . 27	16 16. 83	− . 31
25.0	P		20 28 19. 716	+ . 096	69. 095	+ . 005	−19 5 8. 01	+ . 49	16 16. 34	− . 25
26.0	Bn		20 32 29. 948	+ . 058	68. 908	− . 072	−18 50 19. 79	+ . 21	16 14. 46	−2. 02
29.0	Bn		20 44 55. 802	+ . 052	68. 596	− . 044	−18 3 53. 27	− . 47	16 13. 42	−2. 70
30.0	Bn		20 49 2. 790	+ . 080	68. 497	− . 033	−17 47 43. 53	+ . 97	16 15. 07	− . 92
Feb. 8.0	P		21 25 28. 635	+ . 085	67. 490	− . 010	−15 9 0. 08	+ . 72	16 13. 83	− . 74
12.0	Bn		21 41 19. 614	+ . 084	66. 984	− . 066	−13 51 29. 40	+ . 30	16 12. 20	−1. 63
15.0	P		21 53 4. 825	− . 005	66. 705	− . 025	−12 50 56. 94	−1. 04	16 13. 52	+ . 28
16.0	Ry		21 56 58. 590	+ . 140	66. 627	− . 003	−12 30 17. 57	+1. 63	16 14. 68	+1. 64
19.0	Ry		22 8 35. 113	+ . 113	66. 338	+ . 018	−11 27 18. 15	+ . 65	16 12. 10	− . 33
23.0	Bn		22 24				−10 0 49. 79	+ . 41	16 10. 14	−1. 44
Mar. 2.0	Ry		22 50 18. 687	+ . 127	65. 383	+ . 003	− 7 23 55. 30	+1. 30	16 9. 61	− . 36
8.0	P		23 12 36. 868	+ . 018	65. 031	+ . 041	− 5 5 15. 79	+ . 21	16 8. 66	+ . 21
9.0	Bn		23 16 18. 626	+ . 136	64. 953	+ . 023	− 4 41 50. 77	+2. 03	16 8. 46	+ . 27
15.0	P		23 38 21. 747	+ . 067	64. 582	− . 068	− 2 20 28. 47	+ . 43	16 4. 84	−1. 75
20.0	Ry		23 56 37. 488	− . 092	64. 671	+ . 151	− 0 21 54. 73	+2. 47	16 6. 78	+1. 54
27.0	Bn		0 22 6. 136	+ . 176	64. 398	− . 042	+ 2 23 28. 93	+1. 33	16 2. 66	− . 70
29.0	P		0 29 22. 325	+ . 145	64. 433	− . 017	+ 3 10 22. 39	+1. 39	16 2. 20	− . 61
Apr. 2.0	Ry		0 43 55. 182	+ . 052	64. 485	− . 005	+ 4 43 21. 70	+1. 40	16 1. 68	− . 03
6.0	Bn		0 58 30. 140	+ . 100	64. 511	− . 079	+ 6 14 59. 09	+ . 09	15 58. 98	−1. 61
9.0	Bn		1 9 28. 460	+ . 110	64. 640	− . 040	+ 7 22 38. 04	+ . 84	15 59. 92	+ . 18
10.0	Bn		1 13 8. 434	+ . 134	64. 658	− . 062	+ 7 44 56. 52	+ . 82	15 58. 00	−1. 47
12.0	P		1 20 28. 997	− . 033	64. 833	+ . 033	+ 8 29 8. 60	− . 30	15 59. 46	+ . 55
16.0	Ry		1 35 14. 345	+ . 055	64. 936	− . 054	+ 9 55 51. 40	− . 10	15 58. 80	+ . 97
20.0	Bn		1 50 5. 401	+ . 121	65. 197	− . 023	+11 19 56. 90	. 00	15 56. 13	− . 65
24.0	Bn		2 5 2. 811	+ . 081	65. 450	− . 030	+12 41 2. 86	+ . 06	15 54. 81	− . 97
27.0	Ry		2 16 20. 584	+ . 094	65. 647	− . 043	+13 39 41. 89	+ . 49	15 54. 56	− . 48
May 1.0	Ry		2 31 30. 983	− . 027	66. 049	+ . 059	+14 54 42. 39	+ . 09	15 55. 12	+1. 05
3.0	P		2 39 9. 504	+ . 044	66. 157	+ . 007	+15 30 46. 54	+1. 14	15 52. 82	− . 77
4.0	Bn	W	2 42 59. 563	+ . 043	66. 189	− . 041	+15 48 23. 38	− . 82	15 52. 60	− . 76
14.0	Ry	E	3 21 52. 154	− . 006	67. 053	+ . 013	+18 29 43. 34	+1. 34	15 50. 76	− . 37
17.0	P		3 33 43. 303	+ . 003	67. 372	+ . 082	+19 12 16. 73	+1. 23	15 50. 34	− . 19
18.0	Bn		3 37 41. 600	+ . 120	67. 258	− . 112	+19 25 47. 79	− . 21	15 49. 86	− . 48
21.0	Bn		3 49 39. 308	+ . 028	67. 533	− . 067	+20 4 26. 65	+ . 95	15 48. 60	−1. 19
22.0	Bn		3 53 39. 692	+ . 092	67. 614	− . 066	+20 16 37. 61	+ . 11	15 47. 54	−2. 08
24.0	P		4 1 41. 744	− . 036	67. 832	+ . 012	+20 39 59. 02	+ . 72	15 48. 54	− . 75
25.0	Ry		4 5 43. 643	+ . 033	67. 846	− . 044	+20 51 7. 59	+ . 79	15 48. 66	− . 47
28.0	Ry		4 17 52. 026	+ . 056	68. 099	− . 001	+21 22 22. 91	+ . 71	15 48. 59	− . 06
29.0	Ry		4 21 55. 717	+ . 027	68. 135	− . 025	+21 32 3. 05	− . 25	15 48. 14	− . 36
31.0	P		4 30 4. 515	+ . 035	68. 240	− . 050	+21 50 18. 20	+ . 20	15 47. 73	− . 47
June 1.0	Ry		4 34 9. 563	+ . 033	68. 323	− . 027	+21 58 51. 84	+ . 54	15 46. 78	−1. 27
4.0	Ry		4 46 27. 146	− . 014	68. 466	− . 044	+22 22 14. 68	+1. 68	15 47. 40	− . 23
7.0	P		4 58 48. 296	+ . 106	68. 628	− . 022	+22 42 4. 25	+ . 05	15 46. 76	− . 48
8.0	Ry		5 2 55. 887	+ . 017	68. 645	− . 045	+22 47 53. 42	− . 28	15 46. 79	− . 33
14.0	P		5 27 47. 373	− . 027	68. 896	+ . 036	+23 14 24. 28	+ . 88	15 45. 78	− . 72
15.0	Bn	E	5 31 56. 758	+ . 088	68. 823	− . 057	+23 17 22. 92	+ . 02	15 45. 02	−1. 40

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Date	Obser.	Cl.	App. R. A. of Center	Corr. to Am. Eph.	Trans. Semi diam.	Corr. to Am. Eph.	App. Decl. of Center	Corr. to Am. Eph.	Vert. Semi diam.	Corr. to Am. Eph.
1923			h m s	s	s	s	° ′ ″	″	′ ″	″
June 18.0	Bn	E	5 44 25.088	−0.052	68.868	−0.062	+23 23 54.34	+1.04	15 45.10	−1.10
19.0	Bn		5 48 34.821	+ .071	68.834	− .096	+23 25 14.30	+ .40	15 45.84	− .30
21.0	Ry		5 56 53.932	− .058	68.883	− .057	+23 26 40.92	+ .22	15 46.15	+ .12
22.0	Ry		6 1 3.638	+ .068	68.922	− .018	+23 26 47.56	+ .56	15 46.92	+ .94
25.0	Ry		6 13 31.976	+ .066	68.845	− .055	+23 24 37.25	+ .45	15 44.54	−1.31
29.0	Bn		6 30				+23 15 57.12	− .18	15 44.38	−1.36
July 3.0	P		6 46 40.872	+ .032	68.669	− .021	+23 0 46.08	+ .08	15 44.43	−1.24
5.0	P		6 54 55.851	+ .071	68.617	+ .017	+22 50 45.42	+ .12	15 45.52	− .14
6.0	Ry		6 59 2.836	+ .046	68.492	− .068	+22 45 9.22	+ .12	15 45.42	− .24
10.0	P		7 15 27.295	− .095	68.310	− .030	+22 18 48.53	− .07	15 44.28	−1.43
17.0	Bn		7 43 54.079	+ .029	67.799	− .081	+21 18 1.43	− .07	15 44.88	−1.12
19.0	Bn		7 51 57.148	+ .028	67.684	− .046	+20 57 22.36	+ .96	15 45.00	−1.14
20.0	Ry		7 55 57.925	+ .115	67.598	− .052	+20 46 29.36	− .04	15 46.47	+ .25
23.0	Ry		8 7 56.515	+ .095	67.401	− .009	+20 11 49.43	+ .93	15 46.76	+ .29
26.0	Bn		8 19 49.755	+ .065	67.105	− .065	+19 34 6.15	+ .64	15 45.46	−1.29
27.0	Ry		8 23 46.342	+ .092	67.031	− .049	+19 20 51.98	+ .08	15 46.30	− .55
Aug. 6.0	Bn		9 2 39.209	+ .079	66.167	− .043	+16 51 43.14	− .86	15 46.98	−1.04
7.0	P		9 6 29.231	+ .051	66.155	+ .025	+16 35 13.94	− .26	15 47.43	− .73
13.0	Bn		9 29 17.684	+ .174	65.643	+ .013	+14 50 48.06	− .24	15 48.24	− .85
14.0	P		9 33 3.609	+ .029	65.500	− .050	+14 32 32.77	+ .17	15 48.76	− .50
16.0	P		9 40 34.122	+ .062	65.398	+ .008	+13 55 19.25	− .35	15 50.44	+ .83
20.0	Bn		9 55 28.676	+ .126	65.084	− .016	+12 38 17.74	+ .04	15 50.18	− .19
21.0	P		9 59 10.935	+ .045	65.044	+ .014	+12 18 32.00	+ .40	15 49.76	− .81
30.0	Bn		10 32 12.101	+ .041	64.443	− .047	+ 9 12 30.20	+ .10	15 51.02	−1.44
31.0	Ry		10 35 50.367	+ .067	64.443	+ .003	+ 8 51 1.32	− .08	15 52.24	− .44
Sept. 4.0	Bn		10 50 20.404	+ .024	64.195	− .065	+ 7 23 43.61	− .89	15 51.45	−2.13
10.0	Ry		11 11 58.742	+ .062	64.101	+ .011	+ 5 9 17.32	− .18	15 55.46	+ .46
13.0	Bn		11 22 45.796	+ .126	64.002	− .038	+ 4 0 48.36	+ .06	15 55.01	− .76
14.0	Ry		11 26 21.181	+ .071	64.067	+ .047	+ 3 37 49.77	+ .07	15 56.83	+ .80
17.0	Ry		11 37 7.090	+ .080	64.031	+ .021	+ 2 28 32.54	+ .44	15 57.38	+ .55
24.0	Ry		12 2 14.303	+ .093	64.075	+ .005	− 0 14 34.70	−1.10	15 58.78	+ .06
28.0	Ry		12 16 37.969	+ .089	64.160	− .020	− 1 48 6.40	−1.40	16 0.43	+ .62
Oct. 1.0	Ry		12 27 27.997	+ .047	64.206	− .084	− 2 58 6.84	− .14	15 58.90	−1.72
2.0	P		12 31 5.250	+ .060	64.327	− .003	− 3 21 25.27	−1.07	16 1.79	+ .90
4.0	P		12 38 20.705	+ .045	64.370	− .050	− 4 7 52.83	− .43	16 0.62	− .81
5.0	Ry		12 41 58.979	+ .059	64.505	+ .035	− 4 31 4.18	−1.68	16 1.99	+ .29
8.0	Ry		12 52 56.145	+ .135	64.634	− .006	− 5 40 12.40	− .30	16 3.26	+ .74
9.0	P		12 56 35.889	+ .019	64.735	+ .025	− 6 3 7.56	− .36	16 2.59	− .21
11.0	P		13 3 57.083	+ .133	64.866	+ .026	− 6 48 42.68	+ .12	16 3.64	+ .28
12.0	Ry		13 7 38.264	+ .084	64.833	− .077	− 7 11 22.99	− .49	16 2.48	−1.16
18.0	P		13 29 56.315	+ .035	65.459	+ .059	− 9 25 3.65	− .15	16 5.15	− .17
22.0	Ry	E	13 44 59.790	− .050	65.765	− .005	−10 51 31.41	− .01	16 6.28	− .14
Nov. 1.0	P	W	14 23 27.473	+ .003	66.843	+ .013	−14 15 26.10	− .60	16 8.98	− .02
2.0	Ry		14 27 22.523	+ .033	66.908	− .042	−14 34 39.57	+ .83	16 8.00	−1.25
9.0	Bn		14 55 11.096	+ .006	67.802	+ .032	−16 42 28.73	− .13	16 10.43	− .49
13.0	P		15 11 23.216	+ .136	68.243	− .007	−17 49 26.27	+ .03	16 10.80	−1.04
19.0	Ry		15 36 6.080	+ .070	68.946	− .004	−19 20 26.02	+ .08	16 14.01	+ .87
20.0	Ry		15 40 16.150	+ .120	69.087	+ .017	−19 34 24.90	+ .10	16 12.54	− .81
22.0	P		15 49				−20 1 18.76	− .26	16 12.58	−1.16
27.0	Bn		16 9 48.655	+ .105	69.817	− .003	−21 2 2.24	−1.04	16 12.04	−2.61
Dec. 3.0	P		16 35 37.044	+ .084	70.329	− .041	−22 1 49.66	−1.36	16 14.66	− .92
4.0	Bn		16 39 57.519	+ .139	70.361	− .089	−22 10 19.86	−1.06	16 13.96	−1.76
7.0	P		16 53 2.235	+ .085	70.708	+ .038	−22 33 14.68	+ .22	16 15.10	−1.02
11.0	Bn		17 10 35.666	+ .076	70.915	− .005	−22 57 39.31	− .81	16 16.04	− .57
14.0	P	W	17 23 49.859	+ .049	71.098	+ .028	−23 11 9.85	+ .65	16 16.94	.00

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1923			h m s	s	s	s	° ′ ″	″	′ ″	″
Dec. 17.0	P	W	17 37 6. 746	+0. 146	71. 209	+0. 039	−23 20 33. 33	−0. 53	16 17. 60	+0. 37
1924										
Jan. 8.0	Bn		19 14 27. 992	+ . 152	70. 662	− . 028	−22 20 35. 08	+ . 82	16 16. 87	− . 93
14.0	Ry		19 40 32. 751	+ . 111	70. 190	− . 030	−21 26 12. 25	+ . 45	16 17. 50	− . 08
15.0	Ry		19 44 51. 350	+ . 100	70. 155	+ . 025	−21 15 39. 96	+ . 54	16 16. 88	− . 65
18. 0	Ry		19 57 43. 000	+ . 080	69. 839	− . 011	−20 41 37. 88	+ . 32	16 16. 80	− . 53
25.0	Ry		20 27 17. 639	+ . 059	69. 079	− . 041	−19 8 44. 32	+ . 68	16 15. 78	− . 88
28.0	Ry		20 39 46. 544	− . 006	68. 847	+ . 067	−18 23 30. 71	+2. 09	16 16. 02	− . 26
31.0	P		20 52 8. 450	+ . 070	68. 385	− . 055	−17 35			
Feb. 1.0	Bn		20 56 14. 148	+ . 098	68. 328	− . 002	−17 18 38. 69	+ . 41	16 13. 78	−1. 95
4.0	Bn		21 8 26. 372	+ . 172	67. 931	− . 049	−16 26 44. 05	+ . 25	16 13. 84	−1. 43
7.0	P		21 20 31. 067	+ . 057	67. 602	− . 038	−15 32 15. 18	+ . 62	16 13. 69	−1. 09
11.0	Ry		21 36 26. 009	+ . 019	67. 172	− . 018	−14 15 57. 29	+ . 71	16 13. 31	− . 78
14.0	P		21 48 13. 853	− . 017	66. 893	+ . 023	−13 16 14. 58	+ . 12	16 13. 18	− . 37
21.0	P		22 15 19. 512	+ . 022	66. 160	. 000	−10 49 41. 37	+ . 53	16 11. 18	− . 94
28.0	P		22 41 53. 292	+ . 042	65. 521	− . 019	− 8 14 55. 26	+ . 74	16 9. 50	− . 99
Mar. 3.0	Bn		22 56 52. 222	+ . 152	65. 303	+ . 053	− 6 43 38. 98	+1. 32	16 8. 10	−1. 40
4.0	Bn		23 0 35. 663	+ . 073	65. 108	− . 082	− 6 20 35. 26	+ . 94	16 7. 74	−1. 51
6.0	P		23 8 1. 254	− . 046	64. 981	− . 079	− 5 34 12. 22	+ . 28	16 6. 63	−2. 11
7.0	Ry		23 11 43. 565	+ . 045	65. 030	+ . 030	− 5 10 56. 65	−2. 95	16 9. 60	+1. 11
13.0	P		23 33 49. 150	+ . 060	64. 678	− . 022	− 2 49 48. 04	+1. 76	16 6. 12	− . 83
14.0	Ry		23 37 29. 041	+ . 151	64. 589	− . 081	− 2 26 11. 35	− . 55	16 6. 56	− . 13
17.0	Bn		23 48 26. 889	+ . 109	64. 551	− . 019	− 1 15 6. 51	+ . 59	16 4. 64	−1. 26
18.0	Bn		23 52 5. 817	+ . 167	64. 575	+ . 025	− 0 51 25. 23	− . 33	16 4. 26	−1. 37
24.0	Ry		0 13 56. 060	+ . 100	64. 402	− . 048	+ 1 30 34. 56	− . 24	16 3. 68	− . 30
28.0	Bn	W	0 28 28. 676	+ . 136	64. 419	− . 021	+ 3 4 36. 36	− . 44	16 1. 80	−1. 05
Apr. 3.0	P	E	0 50 19. 400	+ . 080	64. 598	+ . 078	+ 5 23 49. 24	+1. 54	16 2. 13	+ . 97
4.0	Ry		0 53 58. 249	+ . 029	64. 489	− . 061	+ 5 46 42. 78	+ . 98	16 0. 42	− . 46
8.0	Ry		1 8 35. 702	+ . 052	64. 678	+ . 008	+ 7 17 13. 99	− . 51	16 0. 98	+1. 19
14.0	Bn		1 30 38. 950	− . 040	64. 914	− . 016	+ 9 29 12. 61	− . 99	15 56. 67	−1. 52
15.0	Bn		1 34 20. 686	+ . 106	64. 983	+ . 003	+ 9 50 43. 06	+ . 96	15 57. 60	− . 33
24.0	P		2 7 52. 491	+ . 011	65. 563	+ . 033	+12 55 58. 70	+ . 20	15 55. 16	− . 42
25.0	Bn		2 11 38. 369	+ . 079	65. 548	− . 052	+13 15 34. 64	+ . 04	15 54. 23	−1. 09
May 1.0	P		2 34 24. 111	− . 009	66. 043	− . 007	+15 8 26. 82	− . 38	15 53. 26	− . 57
2.0	Ry		2 38 13. 645	− . 005	66. 188	+ . 058	+15 26 26. 49	+ . 89	15 54. 14	+ . 55
5.0	Ry		2 49 45. 692	+ . 152	66. 336	− . 034	+16 18 50. 81	+2. 81	15 53. 18	+ . 29
6.0	Ry		2 53 37. 377	+ . 107	66. 403	− . 047	+16 35 43. 72	+ . 22	15 52. 42	− . 25
13.0	P		3 20 55. 053	− . 047	67. 059	+ . 029	+18 26 12. 88	+2. 38	15 51. 46	+ . 26
15.0	P		3 28 48. 091	+ . 041	67. 238	+ . 048	+18 55 0. 18	− . 12	15 51. 40	+ . 59
19.0	Ry		3 44 40. 696	+ . 086	67. 522	+ . 012	+19 48 47. 06	− . 24	15 50. 10	+ . 05
22.0	P		3 56 40. 863	+ . 013	67. 706	− . 024	+20 25 36. 68	+ . 68	15 48. 80	− . 70
23.0	Bn		4 0 42. 191	+ . 181	67. 795	− . 005	+20 37 10. 89	+ . 09	15 48. 82	− . 50
26.0	Bn		4 13				+21 9 48. 12	+1. 02	15 46. 70	−2. 10
June 5.0	P	E	4 53 41. 058	− . 152	68. 535	− . 055	+22 34 18. 16	+ . 16	15 46. 23	−1. 13
19.0	Bn	W	5 51 42. 814	+ . 134	68. 909	− . 031	+23 26			
20.0	Bn		5 55 52. 364	+ . 154	68. 908	− . 032	+23 26 36. 83	+ . 33	15 45. 04	−1. 01
26.0	Ry		6 20 48. 967	+ . 147	68. 845	− . 035	+23 21 38. 04	+ . 34	15 44. 32	−1. 42
30.0	Ry		6 37 24. 333	+ . 073	68. 787	+ . 027	+23 10 5. 74	+ . 34	15 46. 12	+ . 48
July 11.0	Ry		7 22 38. 079	+ . 019	68. 247	+ . 007	+22 5 19. 13	+ . 23	15 45. 46	− . 33
14.0	Ry		7 34 49. 613	+ . 183	68. 097	+ . 057	+21 39 31. 77	− . 23	15 46. 66	+ . 73
15.0	Ry		7 38 52. 408	+ . 188	68. 039	+ . 069	+21 30 10. 40	−1. 40	15 47. 63	+1. 65
18.0	Bn		7 50 57. 714	+ . 174	67. 775	+ . 025	+20 59 59. 58	− . 52	15 45. 46	− . 69
21.0	Ry		8 2 58. 195	+ . 085	67. 482	− . 028	+20 26 38. 43	+1. 63	15 45. 93	− . 42
24.0	Bn		8 14 53. 915	+ . 175	67. 250	− . 020	+19 50 7. 16	− . 94	15 46. 24	− . 35
28.0	Ry	W	8 30 39. 989	+ . 069	66. 897	− . 033	+18 56 53. 78	+ . 39	15 46. 84	− . 13

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1924			h m s	s	s	s	° ′ ″	″	′ ″	″
July 29.0	Bn	W	8 34 35.143	+0.143	66.840	0.000	+18 42 46.41	−0.69	15 46.72	−0.36
Aug. 5.0	Bn	E	9 1 43.556	− .024	66.205	− .025	+16 55 42.44	+ .14	15 47.03	− .95
14.0	P		9 35 53.829	+ .079	65.493	+ .003	+14 18 36.09	−1.21	15 48.58	− .86
15.0	Ry		9 39 38.858	+ .168	65.502	+ .092	+13 59 58.12	+ .22	15 49.76	+ .15
18.0	Bn		9 50 50.444	+ .024	65.187	− .003	+13 2 40.97	+ .17	15 48.94	−1.21
19.0	P		9 54 33.239	− .101	65.110	− .010	+12 43 10.60	+1.00	15 49.50	− .83
21.0	P		10 1 57.817	+ .017	64.984	+ .004	+12 3 31.34	− .06	15 50.22	− .49
26.0	P		10 20 21.475	+ .065	64.627	− .033	+10 21 8.95	− .85	15 50.48	−1.23
28.0	P		10 27 40.141	+ .041	64.565	+ .015	+ 9 39 1.14	− .46	15 50.86	−1.28
29.0	Ry		10 31 19.067	+ .157	64.473	− .027	+ 9 17 42.81	− .59	15 51.75	−1.61
Sept. 2.0	P		10 45 50.960	+ .100	64.279	− .031	+ 7 51 4.24	− .46	15 51.76	−1.51
4.0	P		10 53 5.001	− .039	64.257	+ .027	+ 7 6 58.92	+ .22	15 54.05	+ .30
8.0	Ry		11 7 30.448	+ .038	64.069	− .051	+ 5 37 26.59	− .03	15 54.85	+ .11
11.0	P		11 18 17.434	+ .004	64.010	− .050	+ 4 29 18.67	+ .57	15 54.47	−1.03
12.0	Ry		11 21 52.867	+ .037	64.022	− .018	+ 4 6 25.73	+ .23	15 54.80	− .96
18.0	P		11 43 24.117	− .003	63.980	− .039	+ 1 47 49.98	− .32	15 56.18	−1.12
23.0	Ry		12 1 21.176	+ .026	64.047	− .013	− 0 8 48.76	− .36	15 58.42	− .19
25.0	P		12 8 32.866	+ .036	64.101	− .009	− 0 55 34.75	+ .75	15 58.52	− .63
Oct. 2.0	P		12 33 50.352	+ .022	64.349	− .011	− 3 39 1.67	+1.03	16 1.02	− .06
3.0	Ry	E	12 37 28.173	+ .003	64.402	− .008	− 4 2 16.18	+ .32	16 0.54	− .82
9.0	Bn	W	12 59 22.718	+ .148	64.842	+ .082	− 6 20 24.20	+1.40	16 3.08	+ .02
10.0	P		13 3 3.130	+ .080	64.829	− .001	− 6 43 12.54	−1.14	16 2.92	− .42
13.0	P		13 14 7.534	+ .144	65.159	+ .109	− 7 50 55.89	−1.29	16 3.75	− .43
14.0	Bn		13 17 49.990	+ .130	65.193	+ .063	− 8 13 16.85	− .35	16 3.03	−1.42
16.0	Bn		13 25 16.761	+ .261	65.318	+ .018	− 8 57 39.59	− .39	16 3.72	−1.28
17.0	P		13 29 0.675	− .035	65.419	+ .039	− 9 19 40.71	−1.31	16 5.10	− .17
20.0	P		13 40 17.078	+ .018	65.694	+ .044	−10 24 50.32	+ .08	16 5.08	− .99
21.0	Bn		13 44 3.964	+ .144	65.746	− .004	−10 46 17.95	−1.55	16 5.66	− .67
23.0	Bn		13 51 39.564	+ .154	66.006	− .066	−11 28 38.65	+ .65	16 5.52	−1.33
24.0	P	W	13 55 28.267	+ .007	66.026	− .014	−11 49 35.53	− .03	16 6.40	− .71
Nov. 6.0	Bn	E	14 46 12.375	+ .195	67.498	− .012	−16 2 56.92	+1.08	16 9.22	−1.21
7.0	Ry		14 50 11.928	+ .048	67.555	− .075	−16 20 45.86	+ .14	16 10.24	− .44
13.0	P		15 14 27.794	+ .064	68.298	− .042	−18 1 31.49	+1.21	16 11.41	− .64
14.0	Ry		15 18 33.457	+ .107	68.537	+ .077	−18 17 17.12	− .42	16 13.16	+ .90
17.0	Ry		15 30 55.517	+ .137	68.869	+ .059	−19 2 31.76	+ .24	16 14.26	+1.38
20.0	P		15 43 25.181	+ .101	69.234	+ .084	−19 44 43.23	+ .67	16 13.10	− .37
21.0	Bn		15 47 36.768	+ .108	69.248	− .012	−19 58 4.86	+ .64	16 12.88	− .78
24.0	Bn		16 0 16.448	+ .178	69.580	.000	−20 35 56.69	+1.01	16 12.43	−1.78
28.0	Ry		16 17 19.941	+ .081	69.947	− .043	−21 21 4.22	+ .68	16 14.10	− .80
Dec. 2.0	Ry		16 34 34.685	+ .155	70.339	− .011	−21 59 44.48	− .68	16 15.48	− .07
9.0	Bn		17 5 7.480	+ .170	70.896	+ .046	−22 50 53.96	−1.86	16 15.00	−1.53
11.0	P		17 13 55.315	+ .095	71.033	+ .073	−23 1 26.70	+1.70	16 16.22	− .53
12.0	Ry		17 18 19.931	+ .171	70.973	− .037	−23 6 4.36	+1.24	16 16.36	− .49
18.0	P		17 44 53.362	+ .072	71.167	− .043	−23 24 4.73	+ .77	16 17.08	− .28
19.0	P	E	17 49 19.741	+ .091	71.256	+ .026	−23 25 27.65	− .25	16 16.40	−1.03
1925										
Jan. 5.5	Bn	W	19 4 38.394	+ .134	70.796	− .044	−22 36 56.39	+ .41	16 16.89	−1.01
6.5	Bn		19 9 1.578	+ .128	70.826	+ .046	−22 29 56.14	+ .86	16 16.73	−1.16
8.5	P		19 17 46.434	+ .074	70.590	− .050	−22 15			
15.5	P		19 48 5.940	+ .120	70.035	− .025	−21 7 26.82	+1.18	16 17.08	− .40
22.5	P		20 17 53.157	+ .067	69.377	.017	−19 40 29.56	+ .34	16 16.26	− .59
Feb. 3.5	Bn		21 7 27.914	+ .144	67.997	− .013	−16 31 0.48	+1.52	16 14.00	−1.35
5.5	P		21 15 31.991	+ .121	67.747	− .033	−15 55 6.98	+1.32	16 14.16	− .88
6.5	Ry		21 19 32.776	+ .096	67.617	.053	−15 36 45.92	+ .78	16 14.07	− .81
12.5	P	W	21 43 20.782	− .018	67.019	.019	−13 41 16.61	+ .59	16 12.42	−1.37

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to— Am. Eph.	Corr. to— Tab. R. A.	Corr. to— Tab. Long.	Limb	App. Decl. of Center	Corr. to— Am. Eph.	Corr. to— Tab. Decl.	Corr. to— Tab. Lat.
1913				h m s	s	s	″		° ′ ″	″	″	″
Aug. 7.2	P	W	I	13 41 37.29	+0.75	−0.13	−1.8		−13 38			
8.2	Ep		I	14 36 40.70	+.74	−.19	−2.6		−19 23			
11.3	P			17 33				N S	−28 30 16.4	−0.4	−0.6	−0.6
14.4	P		I	20 25 12.62	+.76	−.06	−1.1	S	−23 27 29.4	+2.4	−.7	−.5
15.4	P		I	21 15 58.58	+.80	+.03	+.1	S	−19 19 6.4	+2.6	−1.0	−1.2
17.5	Ep		II	22 48 19.53	+.63	−.07	−.9	N	−8 59 22.2	+4.8	+.4	+.6
19.6	P		II	0 14 15.15	+.44	−.23	−3.1	N	+2 32 39.6	+5.0	+.3	+1.5
20.6	P		II	0 57 24.70	+.42	−.26	−3.8	N	+8 17 24.9	+4.5	−.2	+1.3
21.7	P		II	1 42 11.28	+.45	−.25	−3.7	N	+13 47 0.1	+3.9	−.4	+.9
23.7	P		II	3 21 3.67	+.74	−.04	−.7	N	+23 8 28.7	+2.9	.0	+.1
Sept. 4.2	P		I	14 14 48.03	+.74	−.14	−1.9		−17 22			
5.2	M		I	15 12 55.38	+.60	−.33	−4.4		−22 34			
8.3	M		I	18 14 42.21	+.91	−.03	−.5	S	−28 38 4.2	−.1	−1.3	−1.3
9.3	M		I	19 13 15.42	+.84	−.06	−1.0	S	−27 19 32.0	+1.5	−.7	−.6
10.3	M		I	20 8 32.41	+.82	−.03	−.4	S	−24 37 0.4	+3.5	+.5	+.5
11.4	M		I	21 0 8.36	+.84	+.04	+.6	S	−20 47 2.7	+4.1	+.4	+.1
22.7	P		II	5 55 30.88	+.91	+.09	+1.1	N	+28 43 23.5	−.3	+.2	+.2
23.7	P			6 58				S	+27 48 30.2	+.5	+2.3	+2.3
24.7	P		II	8 1 27.22	+.78	+.01	+.1		+25 3			
Oct. 4.2	P		I	16 49 34.83	+.86	−.08	−1.1		−27 42			
6.2	Ep		I	18 53 3.45	+.95	+.06	+.7	S	−27 56 7.2	+1.7	−.2	−.3
9.3	Ep		I	21 32 44.49	+.86	+.10	+1.3	S	−17 42 20.7	+4.1	−.1	−.6
12.4	P		I	23 45 52.99	+.71	+.01	−.3	S	−1 18 55.0	+4.7	−.7	−.7
13.4	Ep		I	0 28 45.92	+.70	−.01	−.3	S	+4 31 16.9	+5.1	−.3	−.3
14.5	Ep		I II	1 12 38.72	+.62	−.11	−2.1	N S	+10 14 5.2	+3.9	−1.2	−.6
15.5	M		II	1 58 32.64	+.56	−.19	−2.6	N	+15 37 5.2	+4.9	+.2	+1.0
16.5	P		II	2 47 23.33	+.59	−.18	−2.5	N	+20 25 44.3	+4.1	+.2	+1.0
21.7	Ep		II	7 38 43.04	+.83	+.07	+.5	S	+26 9 17.3	+.7	+3.1	+3.2
22.7	M	W	II	8 38 43.71	+.70	−.02	−.6	S	+22 25 17.8	−1.7	+1.7	+1.6
Nov. 5.3	P	E	I	21 14 36.66	+.78	+.03	+.2	S	−19 17 52.4	+3.2	−.6	−.7
6.3	P		I	22 2 12.60	+.74	+.03	+.5	S	−14 23 35.0	+5.0	+.7	+.4
7.3	M		I	22 47 2.65	+.79	+.09	+1.4	S	−9 0 1.8	+5.5	+.7	.0
10.3	P		I	0 56 31.73	+.64	−.09	−1.2	S	+8 14 38.2	+5.7	+.2	+.6
12.5	Ep		I	2 29 57.44	+.86	+.08	+.5	N S	+18 48 23.7	+3.2	−1.3	−1.7
13.5	P		I II	3 21 45.13	+.76	−.04	−.6	N	+23 6 11.5	+3.8	+.2	+.3
14.5	P		II	4 17 33.47	+.79	−.03	−.5	N	+26 19 37.5	+2.4	+.1	+.2
17.6	Ep		II	7 20 13.24	+.86	+.10	+1.1	S	+26 45 56.4	.0	+1.8	+2.0
18.7	P		II	8 20 19.09	+.62	−.09	−1.0	S	+23 31 41.8	−3.1	−.3	−.5
20.8	Ep			10 13				S	+13 3 29.0	−5.3	−1.2	−1.1
21.8	P		II	11 5 28.80	+.54	−.11	−.9	S	+6 28 41.7	−5.8	−1.4	−1.8
Dec. 4.2	Ep		I	22 28 49.39	+.79	+.08	+.9	S	−10 59 12.1	+4.2	−.3	−.8
5.2	Ep		I	23 12 48.59	+.68	−.02	−.3	S	−5 22 31.0	+5.1	+.2	+.3
8.3	M		I	1 23 0.99	+.76	.00	−.3	S	+11 43 46.6	+4.8	−.6	−.7
9.4	M		I	2 9 52.01	+.74	−.06	−.9	S	+16 56 53.0	+5.0	.0	+.2
11.4	P		I	3 54 57.52	+.68	−.18	−2.5	N S	+25 12 56.9	+2.7	−.3	+.2
13.5	M		II	5 55 55.74	+.85	.00	.0	N	+28 22 25.2	+.7	+.6	+.6
15.6	Ep		II	8 1 2.32	+.79	+.06	+.6	S	+24 32 55.2	−1.0	+1.2	+1.4
18.7	Ep		II	10 49 22.31	+.61	.00	+.9	S	+8 15 27.6	−6.2	−2.5	−2.2
19.7	Ep		II	11 41 1.82	+.59	−.03	.0	S	+1 25 53.2	−4.7	−.9	−.9
1914												
Jan. 5.3	Ep		I	1 48 56.78	+.87	+.06	+.4	S	+14 58 56.4	+4.6	−.7	−1.0
6.3	M		I	2 37 15.63	+.94	+.08	+.9	S	+19 48 33.4	+4.4	−.1	−.5
7.3	P		I	3 29 35.41	+.93	+.03	.0	S	+23 51 40.3	+2.4	−1.2	−1.4
8.4	Ep		I	4 26 27.01	+.95	+.02	+.1	N S	+26 48 38.5	+1.8	−.6	−.7
10.5	P	E	I	6 31 3.21	+.96	+.07	+.8	N	+28 2 2.4	+.7	+1.3	+1.4

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1914				h m s	s	s	″		° ′ ″	″	″	″
Jan. 13.5	M	E	II	9 35 32.65	+0.73	+0.05	+1.0	S	+16 39 27.4	−4.2	−0.8	−0.4
15.7	M	E	II	11 24 20.47	+ .61	− .01	+ .5	S	+ 3 24 43.1	−5.2	−1.6	−1.4
Feb. 7.4	M	W	I	7 2 57.30	+1.03	+ .09	+1.1	N	+27 16 27.6	− .7	+ .9	+1.1
8.4	M		I	8 6 7.35	+ .92	+ .05	+ .6	N	+24 10 52.0	−2.4	+ .5	+ .7
9.4	P		I	9 7 11.70	+ .80	+ .01	− .2	N	+19 24 33.8	−2.4	+1.3	+1.3
Mar. 3.2	M		I	3 37 24.58	+ .84	− .12	−2.2	S	+24 37 36.3	+1.5	−1.7	−1.3
4.2	M		I	4 32 36.05	+ .90	− .11	−1.4	S	+27 16 27.3	+3.1	+1.2	+1.4
7.4	M		I	7 34 30.21	+1.01	+ .03	+ .2	N	+26 0 27.2	−1.9	+ .8	+ .9
9.4	M		I	9 34 40.89	+ .81	− .03	− .4	N	+16 43 40.0	−4.4	+ .3	+ .2
12.5	P		II	12 22 53.64	+ .66	− .06	− .3	S	− 4 39 26.7	−5.8	−1.4	−1.6
13.6	P		II	13 19 15.73	+ .65	− .07	−1.0	S	−11 52 18.6	−3.6	− .1	− .4
20.8	P		II	20 23 55.75	+ .61	− .04	− .5		−23 0			
Apr. 3.2	P		I	7 8 40.55	+1.02	+ .01	+ .1	N	+27 2 39.4	−2.0	+ .4	+ .4
5.3	S		I	9 6 19.34	+ .95	+ .03	− .1	N	+19 26 44.8	−3.3	+1.5	+1.7
6.4	P		I	10 2 41.24	+ .87	− .01	− .6	N	+13 35 43.1	−3.8	+1.7	+1.7
7.4	M		I	10 57 49.06	+ .83	− .01	− .3	N	+ 6 47 2.5	−5.2	+ .6	+ .6
9.5	P		I	12 48 37.11	+ .74	− .08	−1.2	N S	− 8 1 27.3	−4.8	+ .2	− .2
10.5	M		II	13 46 47.53	+ .78	− .04	− .7	S	−15 0 20.9	−3.5	+ .4	+ .2
13.6	S		II	16 58 43.38	+ .67	− .13	−1.9	S	−27 54 32.7	+1.9	+2.0	+1.8
17.8	P	W	II	20 58 56.23	+ .61	− .01	− .1		−20 3			
May 6.3	M	E	I	12 20 6.75	+ .88	+ .01	+ .4	N	− 4 22 42.3	−6.8	− .9	− .6
9.5	P			15 18				S	−23 12 50.4	−4.1	−1.4	−1.4
16.7	P		II	22 17 39.54	+ .64	+ .04	+ .6	N	−11 32 35.7	+3.9	+ .4	+ .1
18.8	M		II	23 45 44.81	+ .63	+ .02	+ .2		− 0 9			
June 2.3	P		I	11 58 28.07	+ .89	+ .04	− .2	N	− 1 43 11.6	−4.1	+1.8	+2.0
3.3	M		I	12 51 30.70	+ .84	− .04	− .6	N	− 8 39 20.2	−5.7	− .2	− .3
5.4	P		I	14 47 16.05	+ .89	− .07	−1.3	N	−20 55 6.0	−2.2	+1.4	+1.1
6.5	M		I	15 51 25.29	+ .87	− .10	−1.1	N S	−25 14 8.6	−3.6	−1.4	−1.6
10.6	P		II	20 12 24.39	+ .85	+ .11	+1.5	N	−23 13 15.0	+2.6	+ .2	− .2
15.6	M		II	0 12 5.67	+ .56	− .07	−1.2	N	+ 3 39 41.2	+3.8	− .5	− .1
16.7	P		II	0 55 35.10	+ .64	− .02	− .7	N	+ 9 16 43.9	+3.2	−1.2	−1.2
30.2	P		I	12 33 38.07	+ .78	− .09	−1.3	N	− 6 37 49.5	−5.3	+ .2	− .3
July 3.4	M		I	15 24 37.93	+ .86	− .03	− .4		−23 48			
7.5	P		II	19 44 39.71	+1.00	+ .18	+2.4	N S	−24 50 15.6	+2.6	+ .4	− .1
8.5	M		II	20 42 31.35	+ .86	+ .10	+1.9	N S	−20 49 24.6	+4.6	+1.9	+1.4
9.6	P		II	21 35 25.96	+ .81	+ .11	+1.8	N	−15 49 50.0	+3.7	+ .7	.0
16.8	P		II	2 57 10.10	+ .71	− .05	− .7		+21 57			
Aug. 30.3	S		I	18 59 26.07	+ .89	− .07	−1.0	S	−26 58 29.5	+2.0	− .2	− .1
31.3	Sr		I	19 58 52.66	+ .84	− .06	− .8		−24 2			
Sept. 1.4	M		I	20 54 1.79	+ .75	− .08	−1.2	S	−19 50 2.4	+3.3	− .4	− .1
2.4	S		I	21 45 3.96	+ .72	− .06	− .9	S	−14 44 34.9	+3.7	− .3	− .1
4.5	Sr		II	23 18 7.61	+ .70	.00	− .2	N	− 3 11 15.3	+3.9	− .4	− .4
5.5	M		II	0 2 16.19	+ .64	− .05	− .5	N	+ 2 45 6.2	+4.6	+ .3	+ .5
7.6	Sr		II	1 31 5.60	+ .56	− .13	−1.9	N	+13 54 15.2	+3.8	.0	+ .6
9.6	M		II	3 6 53.69	+ .65	− .08	−1.3	N	+22 49 5.6	+2.1	− .8	− .5
14.7	Sr		II	7 49 52.84	+ .89	+ .11	+1.5		+24 34			
28.3	Sr		I	20 37 22.79	+ .76	− .07	− .7	S	−21 12 1.5	+4.7	+1.0	+1.2
29.3	Sr		I	21 29 6.40	+ .78	− .01	+ .2	S	−16 24 41.5	+5.4	+1.2	+1.1
30.4	P		I	22 17 13.62	+ .82	+ .07	+1.5	S	−10 59 25.1	+6.1	+1.6	+1.1
Oct. 1.4	S		I	23 2 47.72	+ .69	− .04	0	S	− 5 12 58.5	+6.0	+1.3	+1.3
2.4	M		I	23 46 55.64	+ .66	− .06	− .4	S	+ 0 40 33.1	+5.7	+ .9	+1.1
5.5	Sr		II	2 1 2.35	+ .59	− .15	−2.5	N	+17 2 10.3	+2.5	−1.5	− .8
12.7	P		II	8 21 32.84	+ .77	+ .01	+ .3	S	+22 19 42.1	−3.7	− .8	− .5
27.3	S			22 2				S	−12 35 12.8	+8.1	+4.0	+3.7
28.3	Sr	E	I	22 48 30.84	+ .58	− .12	−1.9	S	− 6 56 15.2	+4.5	+ .1	+ .7

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1914				h m s	s	s	"		° ' "	"	"	"
Oct. 30.4	S	E	I	0 16 21. 00	+0. 70	−0. 01	+0. 6	S	+ 4 39 53. 9	+6. 6	+1. 8	+1. 6
31.4	Sr	E	I	1 0 18. 38	+ . 65	− . 07	−1. 0		+10 14			
Nov. 23.2	P	W	I	21 44 36. 48	+ . 87	+ . 16	+2. 6	S	−14 17 53. 7	+4. 9	+1. 2	+ . 3
24.3	S		I	22 32 31. 63	+ . 74	+ . 05	+1. 0	S	− 8 40 38. 8	+4. 6	+ . 7	+ . 2
25.3	Sr		I	23 17 44. 75	+ . 55	− . 12	−1. 7	S	− 2 51 37. 4	+3. 9	− . 4	+ . 2
28.4	Sr		I	1 30 7. 28	+ . 67	− . 05	− . 2	S	+13 50 59. 9	+5. 7	+1. 2	+1. 3
Dec. 21.2	Sr			22 12				S	−10 52 35. 3	+4. 4	+ . 6	+ . 5
22.2	S		I	22 59 20. 94	+ . 74	+ . 03	+1. 3	S	− 4 57 44. 6	+6. 2	+2. 2	+1. 7
23.2	Sr		I	23 44 26. 81	+ . 72	+ . 01	+ . 6	S	+ 0 58 34. 4	+5. 0	+ . 7	+ . 5
30.4	P		I	5 29 55. 60	+ . 97	+ . 11	+1. 4	N	+27 52 35. 6	+ . 1	−1. 1	−1. 2
1915												
Jan. 1.5	M			7 25				N	+25 12 39. 7	−2. 0	− . 8	− . 8
4.6	S		II	10 5 38. 06	+ . 66	+ . 02	− . 6	S	+11 30 59. 3	− . 8	+2. 4	+2. 5
7.7	Sr		II	12 36 4. 94	+ . 70	+ . 06	+ . 8		− 7 49			
9.8	M		II	14 26 21. 31	+ . 64	− . 07	−1. 1	S	−19 44 14. 8	−2. 4	+ . 2	− . 1
21.2	P		I	0 54 21. 19	+ . 84	+ . 05	+1. 1	S	+10 9 13. 1	+5. 5	+1. 0	+ . 5
26.4	M		I	5 6 22. 17	+1. 04	+ . 11	+1. 6	S	+27 46 46. 3	+2. 6	+1. 2	+1. 0
28.4	S		I	7 1 48. 49	+1. 19	+ . 29	+3. 9	N	+26 16 34. 9	−2. 0	−1. 0	− . 6
29.4	M	W	I	7 58 50. 34	+ . 96	+ . 11	+1. 6	N	+23 16 57. 4	−2. 6	− . 4	. 0
Feb. 8.8	P	E	II	17 16 53. 68	+ . 66	− . 03	− . 4		−27 55			
18.2	P		I	1 20 11. 27	+ . 81	+ . 01	+ . 2	S	+13 14 16. 1	+4. 6	+ . 2	+ . 1
19.2	S		I	2 7 16. 37	+ . 84	− . 01	+ . 4	S	+18 8 16. 5	+6. 0	+1. 9	+1. 7
20.2	Sr		I	2 56 23. 71	+ . 88	− . 02	− . 2	S	+22 15 8. 0	+3. 7	+ . 1	+ . 1
26.4	P			8 29				N	+21 6 58. 1	−2. 5	+ . 7	+ . 7
27.5	Sr		I	9 23 9. 25	+ . 85	+ . 01	− . 2	N	+16 9 12. 5	−3. 1	+1. 0	+1. 1
Mar. 1.5	Sr		II	11 7 57. 05	+ . 79	+ . 04	+ . 8	S	+ 3 36 46. 7	−5. 7	−1. 0	− . 6
3.6	P		II	12 53 34. 59	+ . 67	− . 06	− . 5	S	−10 5 44. 4	−4. 9	−1. 0	−1. 2
8.8	Sr		II	18 2 57. 86	+ . 61	− . 05	− . 7		−27 48			
9.8	S		II	19 6 53. 60	+ . 66	+ . 03	+ . 4		−26 4			
24.3	Sr		I	7 7 26. 82	+1. 08	+ . 10	+1. 2	N	+25 57 44. 0	−1. 7	+ . 1	+ . 3
26.4	Sr		I	8 57 0. 28	+ . 83	− . 06	−1. 1	N	+18 37 3. 7	−3. 1	+1. 0	+ . 8
27.4	Sr		I	9 49 50. 97	+ . 78	− . 06	−1. 6	N	+13 12 34. 4	−2. 7	+2. 2	+1. 8
29.4	M		I	11 34 15. 53	+ . 80	+ . 01	− . 2	N	+ 0 7 53. 3	−4. 8	+ . 6	+ . 7
30.5	P		I II	12 27 53. 96	+ . 77	− . 04	− . 2	S	− 6 51 39. 5	−6. 0	−1. 2	−1. 2
31.5	S		II	13 24 6. 31	+ . 75	− . 03	−1. 2	S	−13 34 49. 4	−2. 3	+1. 7	+1. 5
Apr. 4.7	Sr		II	17 41 54. 13	+ . 60	− . 14	−1. 8	S	−27 48 15. 2	+ . 6	− . 3	− . 3
7.8	P		II	20 46 24. 13	+ . 64	+ . 03	+ . 4		−19 29			
8.8	M		II	21 38 51. 02	+ . 69	+ . 09	+1. 2		−14 22			
21.2	S		I	7 40 20. 40	+ . 95	− . 03	− . 2	N	+24 6 36. 8	−4. 5	−1. 9	−1. 9
24.3	S	E	I	10 16 37. 22	+ . 82	− . 03	− . 9	N	+ 9 53 58. 0	−4. 2	+1. 3	+1. 2
June 17.2	Sr	W	I	9 39 47. 93	+ . 78	− . 15	−2. 1		+13 35			
19.2	M		I	11 16 45. 07	+ . 85	− . 07	− . 8	N	+ 1 47 15. 1	−7. 0	− . 8	−1. 0
22.3	P		I	13 53 44. 18	+ . 92	− . 03	− . 9	N	−16 56 10. 2	−3. 6	+1. 0	+ . 9
23.3	M		I	14 54 36. 62	+ . 90	− . 06	− . 9	N	−22 1 38. 9	−3. 1	+ . 2	. 0
24.4	S		I	16 0 52. 08	+ . 89	− . 05	− . 4	N	−25 41 19. 0	−3. 7	−1. 9	−1. 9
25.4	P			17 11				S	−27 23 50. 9	−2. 1	−1. 7	−1. 7
26.5	P		I II	18 22 4. 92	+ . 91	+ . 09	+1. 1	S	−26 52 39. 5	−1. 4	−2. 2	−2. 2
28.5	M		II	20 33 7. 26	+ . 81	+ . 14	+2. 4	N	−19 56 36. 3	+4. 1	+1. 9	+1. 4
July 2.7	P		II	23 58 14. 68	+ . 66	+ . 03	+ . 4		+ 3 41			
22.4	Sr		I	16 39 15. 41	+ . 93	− . 10	−1. 5	N S	−26 58 31. 3	− . 4	+ . 5	+ . 3
23.4	M		I	17 48 29. 09	+1. 09	+ . 11	+1. 4	S	−27 27 2. 4	− . 3	− . 8	− . 8
24.4	S		I	18 57 6. 44	+ . 96	+ . 06	+ . 7	S	−25 47 59. 2	− . 3	−2. 0	−2. 1
31.7	S		II	1 11 38. 40	+ . 63	− . 02	− . 4	N	+12 43 33. 0	+2. 6	− . 6	− . 5
Aug. 2.7	S		II	2 49 3. 41	+ . 59	− . 13	−1. 8		+21 47			
Sept. 14.2	Sr		I	15 56 31. 58	+ . 84	− . 14	−1. 9		−25 32			
15.2	P	W	I	17 2 16. 24	+ . 87	− . 13	−1. 6	N	−27 17 46. 6	−1. 9	−1. 9	−2. 1

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1915				h m s	s	s	″		° ′ ″	″	″	″
Sept. 16.3	S	W	I	18 8 40.52	+0.96	−0.03	−0.4	S	−27 6 25.7	+0.5	−0.9	−0.9
20.4	M		I	22 4 5.37	+ .73	− .07	− .7	S	−10 40 42.7	+5.4	+ .8	+1.0
21.4	Sr		I	22 54 11.57	+ .70	− .08	− .8	S	− 4 31 41.1	+5.0	+ .4	+ .6
22.4	S		I	23 42 31.19	+ .66	− .09	−1.2	N	+ 1 42 39.2	+4.4	− .1	+ .3
23.5	S		II	0 30 10.58	+ .67	− .06	− .8	N	+ 7 44 58.5	+4.2	.0	+ .2
24.5	M		II	1 18 9.27	+ .64	− .09	−1.0	N	+13 20 4.6	+4.4	+ .5	+ .8
27.6	Sr		II	3 50 38.95	+ .72	− .02	− .3	N	+25 12 3.7	+1.6	− .6	− .6
28.7	M		II	4 44 49.20	+ .76	+ .01	+ .1	N	+26 55 36.2	+ .8	− .7	− .7
Oct. 12.2	Sr		I	16 40 26.58	+ .76	− .14	−1.9		−26 45			
15.3	Sr		I	19 56 17.57	+ .80	− .03	− .6	S	−22 23 24.2	+2.1	−1.0	− .9
21.4	M		I	0 59 40.09	+ .72	− .05	− .6	N S	+11 14 16.8	+4.4	.0	− .1
22.5	Sr		I II	1 48 2.30	+ .64	− .13	−1.9	N	+16 21 23.1	+3.5	− .6	.0
24.6	S		II	3 30 5.69	+ .65	− .13	−2.1	N	+24 2 30.0	+1.3	−1.6	−1.2
25.6	Sr		II	4 23 49.16	+ .82	+ .04	+ .5	N	+26 13 29.7	+1.5	− .6	− .7
27.6	P	W		6 13				N S	+26 40 52.7	+ .5	+ .3	+ .3
Nov. 10.2	P	E	I	18 29 34.72	+ .86	+ .01	+ .1		−26 12			
13.2	P		I	21 30 54.71	+ .71	+ .03	+1.0	S	−13 55 32.9	+4.8	+1.4	+1.0
15.3	M		I	23 10 26.69	+ .61	− .08	− .5	S	− 2 6 51.2	+5.5	+1.3	+1.5
16.3	Sr		I	23 57 21.15	+ .57	− .13	− .9	S	+ 3 51 21.4	+6.2	+1.9	+2.4
24.6	P			6 48				N S	+25 29 1.9	− .4	− .4	− .4
27.7	P		II	9 20 36.08	+ .80	+ .11	+1.0	S	+14 49 12.3	−1.4	+1.5	+2.0
Dec. 10.2	Sr		I	21 9 15.86	+ .81	+ .06	+ .7		−15 51			
13.3	M		I	23 42 1.21	+ .65	− .03	+ .6	S	+ 2 10 48.4	+5.9	+2.0	+2.0
14.3	Sr		I	0 29 2.17	+ .68	+ .01	+ .7	S	+ 8 0 36.1	+5.0	+1.2	+ .9
15.3	S		I	1 16 14.33	+ .71	+ .02	+1.1	S	+13 22 39.6	+5.6	+1.9	+1.5
18.4	S		I	3 47 1.34	+ .86	+ .11	+1.3	N	+24 51 12.2	+1.9	− .9	−1.3
21.5	Sr		II	6 30 33.13	+ .89	+ .15	+2.0	N S	+25 59 5.2	+ .9	+ .5	+ .6
22.6	P		II	7 23 54.73	+ .86	+ .14	+2.0	N S	+23 47 2.7	− .9	− .4	− .1
23.6	Sr		II	8 15 18.08	+ .74	+ .04	+ .7	S	+20 27 52.0	−2.1	− .8	− .6
24.6	P		II	9 4 36.02	+ .74	+ .08	+1.0	S	+16 12 37.1	−2.2	.0	+ .4
1916												
Jan. 8.2	P		I	22 31 31.21	+ .81	+ .04	+ .4		− 6 32			
14.2	Sr		I	3 29 10.57	+ .81	+ .05	+ .9	S	+24 7 5.0	+3.6	+ .9	+ .7
20.5	Sr		II	8 48 46.55	+ .84	+ .14	+2.1	S	+17 38 49.6	−2.5	− .5	+ .1
23.6	Sr		II	11 10 55.59	+ .61	− .02	− .2	S	+ 1 33 41.3	−4.0	− .4	− .4
25.7	Sr	E	II	12 47 0.28	+ .64	.00	+ .1	S	−10 20 11.3	−4.3	− .8	− .7
Feb. 7.2	S	W	I	0 37 17.56	+ .71	− .09	−1.2		+ 9 12			
10.2	S		I	3 9 12.07	+ .84	+ .02	+ .5	S	+23 1 32.6	+3.4	+ .5	.0
14.3	P		I	6 46 9.37	+1.05	+ .24	+3.1	N	+25 29 20.4	+ .6	+ .8	+1.1
15.3	Sr		I	7 39 11.65	+ .87	+ .07	+1.1	N	+22 54 46.5	−2.1	− .9	− .6
Mar. 9.2	S		I	3 40 2.43	+ .92	+ .04	+ .5	S	+24 31 4.1	+2.0	− .6	−1.0
11.3	P		I	5 29 44.65	+1.04	+ .15	+2.1	S	+26 51 59.7	+2.2	+1.4	+1.1
13.3	M		I	7 17 49.09	+1.01	+ .14	+2.0	N	+23 59 10.0	−1.8	− .6	− .3
16.4	P		I	9 48 15.43	+ .85	+ .05	.0	N	+11 34 1.9	−2.3	+1.8	+2.1
17.4	Sr		I	10 36 9.97	+ .84	+ .07	+ .6	N	+ 5 56 47.4	−4.0	+ .7	+1.1
22.6	P		II	14 57 52.95	+ .83	+ .07	+ .8		−22 6			
23.7	Sr		II	16 0 17.26	+ .69	− .05	− .7	S	−25 14 53.7	−1.8	− .7	− .8
24.7	M		II	17 5 30.33	+ .78	+ .07	+1.0	S	−26 41 44.5	−1.4	−1.4	−1.3
25.7	P		II	18 11 28.05	+ .66	− .01	− .2	N	−26 15 25.0	− .1	−1.0	−1.0
Apr. 10.3	M		I	7 47 56.49	+ .92	+ .04	+ .6	N	+22 1 34.0	−2.9	− .9	− .8
12.3	S		I	9 26 49.25	+ .86	+ .01	+ .1	N	+13 40 32.9	−3.8	+ .4	+ .5
13.3	M		I	10 14 31.65	+ .84	+ .02	− .1	N	+ 8 23 11.8	−4.4	+ .5	+ .6
15.4	S		I	11 50 49.64	+ .80	.00	− .8	N	− 3 28 42.8	−3.9	+1.6	+1.6
17.5	M		I II	13 35 43.32	+ .75	− .06	−1.3	S	−15 19 27.1	−3.8	+ .6	+ .3
18.5	P	W	II	14 34 0.64	+ .86	+ .03	+ .6	S	−20 19 32.2	−4.2	− .9	− .6

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1916				h m s	s	s	″		° ′ ″	″	″	″
Apr. 19.6	P	W	II	15 36 42.72	+0.89	+0.07	+1.1	S	−24 5 50.5	−3.4	−1.4	−1.0
25.8	M	W	II	21 51 43.57	+ .53	− .07	−1.0		−10 53			
May 9.2	M	E	I	9 6 29.31	+ .92	+ .04	+ .6	N	+15 25 45.1	−4.0	− .2	.0
10.3	P		I	9 53 42.53	+ .98	+ .12	+1.2	N	+10 30 16.2	−3.6	+1.2	+1.8
15.3	M		I	14 5 4.51	+ .86	+ .01	+ .3	N S	−18 3 3.0	−5.0	− .8	− .6
June 12.4	Sr		I	14 34 42.00	+ .97	+ .07	+ .9	N	−20 28 42.3	−4.0	− .1	+ .3
13.4	Sr		I	15 38 9.96	+ .98	+ .08	+1.3	N S	−24 9 4.0	−4.0	−1.4	−1.1
18.6	Sr		II	21 12 30.73	+ .79	+ .15	+2.2	N	−14 33 31.6	+3.0	+ .4	− .4
22.8	P		II	0 40 10.63	+ .60	− .05	−1.0	N	+ 9 47 17.5	+2.6	− .9	− .6
23.8	P		II	1 29 51.72	+ .61	− .07	− .9		+15 2			
July 6.2	Sr		I	11 37 0.43	+ .88	+ .01	+ .2		− 2 19			
7.2	S		I	12 24 7.19	+ .93	+ .04	+ .5		− 8 0			
8.3	S		I	13 14 0.90	+ .90	− .02	− .3		−13 30			
11.3	M		I	16 11 34.37	+1.04	+ .09	+1.2	N	−25 25 58.5	−2.6	− .7	− .4
12.4	S			17 20				S	−26 23 52.5	− .4	.0	.0
14.5	M			19 39				S	−22 6 24.2	−2.2	−4.1	−4.0
Aug. 4.2	P	E	I	12 57 1.26	+ .86	− .03	− .8		−11 42			
Sept. 5.3	P	W	I	17 30 57.78	+1.09	+ .08	+1.1		−26 13			
9.4	M		I	21 41 29.08	+ .84	+ .03	+ .7	S	−11 28 50.4	+4.8	+ .5	+ .2
11.5	M		I II	23 31 17.10	+ .77	+ .02	+ .6	N	+ 1 31 32.7	+4.9	+ .5	+ .2
12.5	S		II	0 24 25.07	+ .74	.00	− .3	N	+ 7 54 12.9	+3.2	− .9	− .9
13.6	P		II	1 17 39.26	+ .78	+ .04	+ .6	N	+13 41 49.3	+3.5	− .1	− .5
16.7	P		II	4 2 39.76	+ .91	+ .16	+2.2	N	+24 55 7.9	+2.0	.0	− .5
19.8	S		II	6 48 19.58	+ .93	+ .16	+2.2		+24 25			
20.8	P		II	7 40 19.18	+1.04	+ .27	+3.7	S	+21 48 52.3	−1.7	− .4	+ .3
Oct. 6.3	Sr		I	21 18 27.33	+ .92	+ .05	+ .8	S	−13 42 55.3	+4.4	+ .1	− .3
7.4	P		I	22 13 40.82	+ .89	+ .06	+ .7	S	− 7 45 7.0	+4.5	− .4	− .9
10.5	P		I	0 52 21.69	+ .73	− .08	− .8	N	+10 58 51.7	+5.0	+ .4	+ .7
11.5	Sr		II	1 46 4.29	+ .78	− .02	− .3	N	+16 17 54.4	+4.1	+ .1	+ .1
12.6	M		II	2 41 8.85	+ .83	+ .02	+ .3	N	+20 37 55.2	+3.4	+ .1	− .1
13.6	P		II	3 37 29.23	+1.00	+ .20	+2.9	N	+23 45 8.4	+3.6	+1.0	+ .2
14.6	P		II	4 34 26.98	+1.00	+ .20	+2.7	N	+25 30 56.3	+2.1	+ .3	− .2
17.7	S	W	II	7 19 14.80	+ .92	+ .16	+2.2	S	+22 44 56.2	−1.0	− .2	− .5
31.2	Sr	E	I	19 0 40.34	+1.11	+ .17	+2.2		−23 31			
Nov. 1.2	S		I	20 2 27.67	+ .96	+ .05	+ .6	S	−19 57 12.3	+2.9	− .5	− .7
2.2	M		I	21 0 41.82	+ .86	− .01	− .6	S	−15 9 48.7	+2.8	−1.6	−1.6
3.3	Sr		I	21 55 41.19	+ .88	+ .03	+ .5	S	− 9 32 13.0	+4.8	− .3	− .5
4.3	S		I	22 48 19.93	+ .78	− .06	− .9	S	− 3 27 6.4	+4.9	− .6	− .3
5.4	S		I	23 39 46.68	+ .73	− .11	−1.1	S	+ 2 44 49.4	+6.0	+ .5	+1.0
8.5	Sr		I	2 17 18.04	+ .85	− .01	− .3	N S	+18 52 35.7	+3.9	− .2	− .2
10.5	P		II	4 9 43.09	+ .99	+ .17	+2.2	N	+24 47 9.1	+2.4	.0	− .5
11.6	P		II	5 6 52.73	+1.11	+ .25	+3.3	N	+25 42 56.7	+1.1	− .5	− .9
18.7	P		II	10 56 29.73	+ .94	+ .20	+3.2	S	+ 2 20 2.8	−6.3	−1.6	− .3
Dec. 1.2	Sr		I	22 32 29.00	+ .81	− .03	− .1	S	− 5 5 6.7	+5.5	+ .4	+ .4
2.3	S		I	23 23 59.68	+ .80	− .03	.0	S	+ 1 4 23.8	+6.1	+ .8	+ .7
5.3	P		I	1 58 8.19	+ .91	+ .01	+ .5	S	+17 26 56.9	+5.5	+1.0	+ .8
6.3	Sr		I	2 52 11.89	+ .86	− .06	− .6	S	+21 20 33.0	+4.2	+ .4	+ .5
7.4	M		I	3 47 55.25	+1.00	+ .08	+1.0	N S	+24 4 23.6	+3.1	+ .1	− .2
9.5	Sr			5 41				N S	+25 31 50.9	+1.2	− .1	− .1
12.6	S		II	8 19 16.96	+ .93	+ .10	+1.0	S	+18 24 22.9	− .4	+1.3	+1.6
13.6	P		II	9 7 0.12	+1.00	+ .20	+3.0	S	+14 14 14.5	−3.4	− .7	+ .3
17.7	M	E	II	12 8 27.06	+ .90	+ .13	+1.9	S	− 6 26 18.1	−5.8	− .8	+ .2
1917												
Jan. 6.3	Sr	W	I	6 17 8.02	+ .99	+ .08	+1.2	N S	+24 51 11.8	− .4	−1.0	−1.0
7.5	M	W	I II	7 10 36.93	+1.00	+ .12	+1.8	N S	+22 47 43.6	−1.8	−1.4	−1.2

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1917				h m s	s	s	″		° ′ ″	″	″	″
Jan. 8.5	S	W	II	8 1 41. 39	+0. 89	+0. 05	+0. 2	S	+19 41 45. 5	+0. 6	+1. 9	+2. 1
9.6	P		II	8 50 16. 75	+ . 93	+ . 11	+1. 1	S	+15 45 32. 3	− . 9	+1. 3	+1. 8
18.8	P		II	16 18 43. 66	+1. 09	+ . 19	+2. 5		−25 4			
26.2	Sr		I	23 36 32. 60	+ . 80	. 00	. 0		+ 2 42			
30.3	Sr		I	3 12 17. 67	+ . 96	+ . 08	+ . 9	S	+22 31 39. 4	+2. 5	− . 4	− . 8
Feb. 1.3	M		I	5 4 7. 40	+ . 98	+ . 08	+1. 2	S	+25 40 2. 5	+3. 0	+1. 6	+1. 5
6.5	P		I II	9 21 29. 78	+ . 90	+ . 11	+1. 7	S	+12 47 52. 6	−3. 2	− . 4	+ . 2
7.5	P		II	10 7 3. 92	+ . 88	+ . 11	+1. 7	S	+ 7 55 1. 3	−4. 1	− . 7	. 0
16.7	Sr		II	17 59 51. 17	+1. 06	+ . 17	+2. 3		−25 10			
Mar. 6.4	P		I	9 51 43. 96	+ . 90	+ . 11	+1. 7	N	+ 9 36 25. 1	−4. 4	− . 8	− . 1
9.5	M		II	12 7 23. 44	+ . 85	+ . 12	+1. 8	S	− 6 9 32. 6	−5. 1	− . 7	+ . 2
15.8	M		II	17 35 59. 84	+ . 85	+ . 06	+ . 8		−25 18			
17.8	P		II	19 42 5. 95	+ . 89	+ . 11	+1. 5		−20 47			
28.2	S		I	5 18 7. 19	+1. 00	+ . 07	+1. 0		+25 17			
29.2	M		I	6 14 25. 13	+1. 07	+ . 16	+2. 1	N	+24 31 14. 6	+ . 3	+ . 3	+ . 4
30.3	Sr		I	7 8 16. 14	+1. 02	+ . 13	+1. 8	N	+22 32 32. 5	−1. 8	− . 9	− . 6
Apr. 3.3	P		I	10 20 7. 17	+ . 89	+ . 08	+ . 7	N	+ 6 19 16. 0	−3. 6	+ . 9	+1. 4
7.5	Sr		II	13 27 12. 27	+ . 80	+ . 04	+ . 5	S	−14 26 29. 1	−4. 5	− . 1	+ . 2
9.6	Sr			15 16				S	−22 13 3. 2	−3. 2	− . 6	− . 6
10.6	S		II	16 15 18. 89	+ . 80	+ . 06	+ . 7	S	−24 25 29. 7	− . 7	+ . 7	+ . 9
13.7	S		II	19 21 51. 13	+ . 70	+ . 01	+ . 3	N	−21 41 58. 6	+2. 7	+1. 3	+1. 2
14.7	P	W	II	20 21 46. 91	+ . 65	− . 02	− . 3		−17 45			
30.3	M	E	I	10 1 46. 97	+ . 98	+ . 13	+1. 6	N	+ 8 7 43. 6	−4. 2	+ . 3	+1. 0
May 1.3	P		I	10 46 43. 99	+1. 09	+ . 26	+3. 1	N	+ 3 3 14. 4	−4. 2	+ . 9	+2. 4
2.4	Sr		I	11 31 52. 33	+ . 98	+ . 15	+1. 7	N	− 2 12 23. 5	−4. 9	+ . 7	+1. 6
3.4	Sr		I	12 18 14. 08	+ . 97	+ . 14	+1. 7	N	− 7 28 40. 8	−5. 3	+ . 3	+1. 2
11.7	P		II	20 3 58. 24	+ . 63	− . 01	−0. 3	N	−18 50 0. 9	+1. 5	− . 8	− . 8
14.8	Sr		II	22 51 1. 24	+ . 52	− . 08	−1. 1		− 2 27			
25.2	P		I	8 7 59. 40	+1. 02	+ . 17	+2. 4		+18 28			
June 4.4	P		I	16 29 4. 39	+ . 88	. 00	− . 2	N S	−24 34 16. 7	−1. 2	+ . 7	+ . 7
7.6	M		II	19 42 36. 54	+ . 78	+ . 05	+ . 5	N	−20 8 28. 1	+ . 4	−1. 6	−1. 8
13.7	P	E	II	1 13 52. 87	+ . 70	+ . 08	+1. 0		+13 23			
1918												
Jan. 19.2	Sr	W	I	1 59 35. 99	+ . 89	− . 01	+ . 1	S	+16 54 30. 4	+5. 0	+ . 9	+ . 8
21.3	Sr		I	3 56 19. 14	+ . 92	− . 01	− . 4	S	+23 2 54. 7	+1. 5	− . 9	− . 9
22.3	P		I	4 55 44. 34	+1. 05	+ . 11	+1. 5	S	+24 4 29. 0	+1. 9	+ . 4	+ . 2
23.3	M		I	5 54 24. 33	+ . 94	+ . 03	+ . 3	S	+23 40 50. 3	+ . 1	− . 4	− . 4
25.5	Sr		I	7 45 11. 60	+ . 80	− . 05	− . 7	N S	+19 8 35. 6	−1. 3	− . 1	− . 2
Feb. 15.2	Sr		I	1 39 36. 08	+ . 74	− . 12	−1. 6		+15 9			
18.3	M		I	4 37 52. 04	+ . 90	. 00	. 0	S	+23 44 27. 9	+2. 0	+ . 6	+ . 5
20.3	M		I	6 33 43. 98	+ . 93	+ . 05	+ . 8	N S	+22 30 21. 3	− . 7	− . 4	− . 3
21.4	Sr		I	7 28 4. 48	+ . 92	+ . 07	+1. 2	N	+20 4 3. 4	−2. 4	−1. 2	−1. 0
23.4	M		I	9 8 25. 29	+ . 80	+ . 01	+ . 6	N S	+12 37 52. 4	−4. 3	−1. 7	−1. 5
26.5	Sr		II	11 25 4. 60	+ . 78	+ . 06	+1. 0	S	− 1 39 44. 3	−4. 2	− . 4	+ . 1
Mar. 1.6	Sr		II	13 42 50. 13	+ . 68	− . 02	+ . 3	S	−15 16 28. 8	−4. 9	−1. 4	−1. 2
2.6	P		II	14 32 30. 09	+ . 73	+ . 02	+ . 3	S	−18 50 13. 8	−3. 3	− . 1	+ . 1
3.7	M		II	15 24 56. 77	+ . 76	+ . 04	+ . 6	S	−21 35 2. 0	−3. 1	− . 6	− . 3
15.2	P		I	2 12 27. 30	+ . 96	+ . 05	+ . 7		+17 25			
16.2	M		I	3 14 3. 70	+ . 95	+ . 03	. 0	S	+21 0 14. 2	+2. 1	− . 8	−1. 0
18.2	Sr		I	5 16 44. 84	+ . 99	+ . 08	+1. 1	S	+23 40 8. 4	+1. 3	+ . 5	+ . 4
22.4	P			8 53				N	+13 49 41. 3	−2. 9	− . 2	− . 2
23.4	Sr		I	9 40 12. 37	+ . 80	+ . 03	+ . 3	N	+ 9 28 37. 7	−2. 9	+ . 4	+ . 6
25.4	Sr		I	11 10 26. 01	+ . 76	+ . 03	+ . 3	N S	− 0 3 25. 8	−3. 7	+ . 5	+ . 7
26.5	P		I	11 55 7. 79	+ . 84	+ . 13	+1. 8	S	− 4 53 44. 2	−4. 4	− . 2	+ . 8
27.5	P	W	II	12 40 35. 64	+ . 78	+ . 09	+1. 5	S	− 9 33 17. 7	−4. 9	− . 7	. 0

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1918				h m s	s	s	″		° ′ ″	″	″	″
Mar. 28.5	M	W	II	13 27 32. 60	+0. 71	+0. 04	+0. 7	S	−13 51 19. 4	−4. 6	−0. 7	−0. 3
29.6	Sr		II	14 16 34. 53	+ . 66	. 00	− . 3	S	−17 36 13. 4	−2. 7	+ . 8	+ . 8
30.6	P		II	15 8 5. 03	+ . 84	+ . 18	+2. 7	S	−20 35 46. 1	−3. 8	−1. 0	− . 2
Apr. 4.8	Sr		II	19 52 43. 87	+ . 90	+ . 18	+2. 5		−18 13			
5.8	M		II	20 50 15. 68	+ . 81	+ . 09	+1. 2		−13 55			
15.2	M		I	5 51 34. 38	+1. 00	+ . 05	+ . 6		+23 4			
18.3	M		I	8 35 59. 00	+ . 88	+ . 03	+ . 7	N	+14 59 35. 9	−3. 5	− . 8	− . 6
21.3	M		I	10 55 14. 81	+ . 85	+ . 08	+1. 7	N	+ 1 27 0. 4	−5. 8	−1. 4	− . 7
27.6	P		II	15 45 3. 19	+ . 72	+ . 03	+ . 6	S	−21 58 45. 8	−3. 8	−1. 2	−1. 0
May 1.7	P		II	19 33 45. 70	+ . 76	+ . 13	+1. 6	N	−19 8 28. 1	+1. 1	− . 7	−1. 0
16.2	Sr			9 5				N	+12 19 41. 8	−4. 5	−1. 3	−1. 2
17.2	P		I	9 52 50. 03	+ . 86	− . 04	. 0	N	+ 7 49 36. 6	−5. 5	−1. 4	−1. 4
18.3	Sr		I	10 38 27. 45	+ . 90	+ . 07	+1. 1	N	+ 3 5 16. 4	−4. 7	− . 2	+ . 4
20.3	P		I	12 8 10. 09	+ . 82	+ . 02	+ . 1	N	− 6 27 48. 5	−4. 5	+ . 6	+ . 9
22.4	Sr		I	13 42 2. 60	+ . 84	+ . 04	+ . 6	N	−15 4 52. 0	−4. 8	. 0	+ . 3
23.4	Sr		I	14 32 26. 55	+ . 76	− . 03	− . 1	N S	−18 35 11. 4	−5. 1	− . 9	− . 9
25.5	Sr		II	16 21 33. 47	+ . 86	+ . 06	+ . 7	N S	−22 53 6. 4	−1. 4	+ . 9	+1. 1
26.5	Sr		II	17 19 23. 11	+ . 90	+ . 13	+1. 7	N S	−23 15 44. 6	− . 7	+ . 4	+ . 5
31.6	P		II	22 2 57. 00	+ . 41	− . 19	−3. 4	N	− 6 45 5. 2	+2. 2	−1. 7	− . 7
June 3.7	Sr		II	0 46 27. 72	+ . 45	− . 17	−2. 3		+10 17			
15.2	P		I	11 5 13. 70	+ . 82	− . 01	− . 8	N	+ 0 9 16. 8	−2. 5	+2. 1	+2. 0
17.3	M		I	12 35 37. 33	+ . 92	+ . 10	+1. 5	N	− 9 15 23. 6	−5. 3	− . 3	+ . 5
19.3	M		I	14 11 40. 45	+ . 84	+ . 01	. 0	N	−17 16 45. 7	−4. 0	+ . 6	+ . 7
23.5	Sr		I	17 55 29. 06	+1. 04	+ . 21	+2. 8	N S	−22 49 46. 9	− . 3	. 0	+ . 1
26.6	P		II	20 50 50. 78	+ . 62	− . 10	−1. 5	N	−13 32 14. 8	+2. 8	− . 4	− . 1
27.6	Sr		II	21 46 17. 64	+ . 43	− . 26	−3. 9	N	− 8 25 57. 0	+3. 1	− . 8	+ . 4
July 1.8	Sr		II	1 25 11. 10	+ . 54	− . 12	−2. 5	N	+13 43 33. 6	+1. 8	−2. 0	−1. 3
Oct. 10.2	P		I	17 15 23. 20	+ . 93	+ . 01	+ . 1		−22 36			
14.3	P		I	20 58 31. 94	+ . 85	− . 03	− . 8	S	−12 35 12. 2	+4. 0	− . 8	− . 7
15.3	P		I	21 54 5. 95	+ . 90	+ . 06	+ . 5	S	− 7 32 34. 0	+4. 7	− . 8	−1. 2
17.4	Sr		I	23 47 24. 39	+ . 84	+ . 07	+ . 9	S	+ 4 2 10. 0	+5. 9	+ . 3	− . 2
18.5	Sr			0 47				N S	+ 9 48 33. 7	+5. 6	+ . 6	+ . 6
21.6	M		II	3 57 50. 93	+ . 90	+ . 19	+2. 8	N	+21 35 22. 5	+3. 8	+1. 7	+1. 1
22.6	M		II	5 3 1. 08	+ . 82	+ . 14	+1. 8	N	+22 31 55. 2	+1. 6	+ . 5	+ . 2
28.8	P		II	10 28 19. 66	+ . 81	+ . 15	+2. 1		+ 4 4			
Nov. 8.2	Sr		I	18 48 59. 15	+ . 88	− . 02	− . 3		−20 28			
11.2	M		I	21 31 52. 51	+ . 92	+ . 03	. 0	S	− 9 28 14. 5	+4. 2	−1. 2	−1. 4
12.3	Sr		I	22 25 34. 64	+ . 90	+ . 01	− . 3	S	− 4 15 9. 4	+5. 1	−1. 1	−1. 2
14.3	M		I	0 16 22. 96	+ . 91	+ . 03	+ . 6	S	+ 7 1 46. 7	+7. 0	+ . 8	+ . 5
15.4	Sr		I	1 15 18. 04	+ . 96	+ . 08	+ . 8	S	+12 23 7. 0	+5. 2	− . 3	− . 8
25.7	Sr		II	10 57 25. 87	+ . 66	+ . 04	+ . 2	S	+ 0 57 8. 5	−2. 5	+ . 8	+1. 0
26.8	Sr		II	11 42 52. 12	+ . 68	+ . 06	+ . 6	S	− 3 43 18. 8	−3. 0	+ . 7	+1. 1
Dec. 12.3	M		I	0 50 6. 99	+ . 89	− . 03	− . 4	S	+10 13 28. 9	+6. 2	+ . 3	+ . 4
17.5	Sr			6 5				N S	+21 48 9. 4	. 0	− . 1	. 0
19.6	P	W	II	8 5 11. 38	+ . 78	− . 01	. 0	S	+16 23 38. 0	−2. 1	− . 5	− . 5
1919												
Jan. 6.2	P	E	I	22 45 9. 80	+ . 75	− . 03	− . 4		− 2 18			
9.2	Sr		I	1 28 48. 93	+ . 81	− . 08	−1. 4	S	+13 24 23. 8	+4. 8	− . 2	− . 1
10.3	Sr		I	2 27 29. 08	+ . 86	− . 07	−1. 2	S	+17 31 32. 3	+4. 0	− . 3	. 0
13.4	Sr			5 36				N S	+22 16 4. 9	− . 1	− . 8	− . 8
20.6	P		II	11 50 54. 16	+ . 69	+ . 02	+ . 3	S	− 4 20 33. 0	−3. 6	− . 1	+ . 1
24.7	M		II	15 2 40. 77	+ . 81	+ . 14	+2. 2	S	−19 19 44. 0	−4. 0	− . 9	− . 3
Feb. 6.2	M		I	2 10 6. 83	+ . 83	− . 02	− . 5	S	+16 12 6. 8	+4. 1	+ . 1	+ . 1
7.2	M		I	3 10 12. 13	+ . 86	− . 03	− . 4	S	+19 33 34. 4	+3. 9	+ . 8	+ . 8
10.4	M	E		6 15				N S	+21 25 7. 4	−1. 1	− . 8	− . 8

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to— Am. Eph.	Corr. to— Tab. R. A.	Corr. to— Tab. Long.	Limb	App. Decl. of Center	Corr. to— Am. Eph.	Corr. to— Tab. Decl.	Corr. to— Tab. Lat.
1919				h m s	s	s	″		° ′ ″	″	″	″
Feb. 18.6	Sr	E	II	13 5 4.76	+0.68	+0.02	+0.7	S	−11 5 39.0	−4.4	−0.9	−0.6
Mar. 6.2	P		I	2 50 28.52	+ .90	+ .03	+ .3	S	+18 20 15.7	+3.7	+ .4	+ .2
7.2	P		I	3 52 53.51	+ .91	+ .02	− .4	S	+20 52 21.0	− .2	−2.5	−2.5
10.3	P		I	6 56 33.22	+ .76	− .10	−1.5	N	+19 50 42.7	.0	+1.3	+1.2
11.3	P		I	7 53 2.96	+ .80	− .04	− .6	N	+17 0 14.4	−1.3	+ .8	+ .7
18.6	M			13 35				S	−13 19 56.2	−5.0	−1.5	−1.4
20.6	M			15 14				S	−19 19 10.7	−3.3	− .8	− .7
24.7	P	E	II	18 47 2.05	+ .90	+ .20	+2.7	N	−20 3 38.9	− .3	−1.4	−1.7
Apr. 17.6	M	W	II	15 47 31.55	+ .75	+ .16	+2.2	S	−20 25 42.5	−2.5	− .2	+ .4
18.6	P		II	16 39 58.49	+ .68	+ .09	+1.2	S	−21 30 28.3	− .6	+1.0	+1.2
21.7	Sr		II	19 20 35.15	+ .79	+ .18	+2.4	N	−18 25 46.2	+1.2	− .4	− .8
May 13.4	P			14 40				N S	−17 32 35.5	−4.1	− .6	− .6
22.7	Sr		II	22 32 18.65	+ .64	+ .07	− .1	N	− 3 30 58.3	+2.0	−2.5	−2.8
June 2.2	P		I	8 42 41.88	+ .75	− .11	−1.6		+13 13			
3.2	P		I	9 35 43.53	+ .80	− .03	+ .2	N	+ 8 49 43.1	−4.9	−1.4	−1.3
10.4	Sr		I	15 13 18.11	+ .72	+ .03	+ .2	N	−19 10 1.4	−2.7	+ .6	+ .8
13.5	Sr			17 52				N S	−21 15 39.2	−1.2	− .5	− .4
16.6	P		II	20 32 29.74	+ .62	+ .01	.0	N	−14 0 12.8	+2.3	− .2	− .3
17.6	P		II	21 24 17.32	+ .51	− .07	−1.5	N	− 9 52 30.9	+2.4	−1.0	− .7
19.7	M		II	23 7 23.40	+ .56	.00	− .8	N	− 0 7 8.5	+2.6	−1.7	−1.6
July 3.2	M		I	11 42 6.53	+ .65	− .11	− .7	N	− 3 14 27.5	−5.7	−1.6	−2.0
Aug. 7.4	P			18 5				N S	−20 54 34.1	− .5	− .3	− .3
8.4	P			19 0				N S	−19 16 49.2	+1.4	+ .4	+ .4
9.4	Sr			19 54				N S	−16 36 8.0	+2.2	.0	.0
11.5	Sr		II	21 41 0.54	+ .55	− .11	−2.1	N	− 8 36 9.3	+2.9	−1.1	− .5
14.6	P		II	0 21 36.46	+ .64	.00	− .4	N	+ 6 40 59.2	+3.8	− .6	− .7
15.6	P		II	1 17 27.12	+ .57	− .07	−1.5	N	+11 30 47.4	+3.2	− .8	− .4
18.7	P		II	4 17 50.64	+ .72	.00	− .2	N	+20 48 13.5	+1.3	− .3	− .3
19.8	P		II	5 20 50.75	+ .77	+ .04	+ .5		+21 20			
Sept. 8.4	Sr			22 11				N S	− 5 53 7.0	+2.9	−1.6	−1.4
12.6	P		II	1 55 36.87	+ .59	− .07	−1.2	N	+14 9 14.5	+3.8	− .1	+ .2
16.7	M	W	II	6 4 39.13	+ .69	− .06	− .8		+20 36			
Oct. 6.4	P	E	I	22 37 56.26	+ .68	.00	− .6	S	− 3 14 56.3	+3.8	−1.3	−1.3
7.4	P		I	23 32 42.36	+ .64	− .02	− .4	S	+ 1 58 21.0	+5.4	+ .2	+ .2
10.6	P		II	2 30 27.21	+ .65	− .02	− .5	N	+16 13 48.9	+3.3	− .2	− .1
Nov. 3.3	Sr		I	23 4 38.36	+ .76	+ .03	+ .6	S	− 0 36 48.2	+6.8	+1.0	+ .7
6.4	P			1 57				N S	+14 9 47.2	+4.4	− .2	− .2
13.7	Sr		II	9 17 28.26	+ .73	+ .04	+ .7	S	+10 14 31.7	−2.8	+ .1	+ .4
14.8	Sr	E	II	10 9 9.24	+ .70	+ .04	+ .2	S	+ 5 46 57.6	−2.3	+1.1	+1.4
Dec. 29.2	P	W	I	0 7 22.35	+ .75	− .09	−1.6	S	+ 5 7 53.1	+5.7	− .2	+ .3
30.2	P		I	1 1 6.64	+ .78	− .10	−1.6	S	+ 9 49 11.3	+5.7	.0	+ .5
1920												
Jan. 2.3	M		I	4 2 46.43	+1.12	+ .11	+1.1	S	+19 55 16.6	+1.5	−1.4	−1.7
12.7	P		II	13 37 34.02	+ .74	+ .09	+2.3	S	−12 33 21.3	−6.0	−2.6	−1.8
13.8	P		II	14 26 53.97	+ .75	+ .12	+2.1	S	−15 48 15.9	−4.5	−1.5	− .7
28.2	Bn		I	2 36 42.41	+ .97	− .01	+ .1	S	+16 12 36.9	+5.8	+1.5	+1.4
29.3	Bn		I	3 37 18.59	+1.10	+ .06	+ .6	S	+18 57 3.3	+3.0	− .2	− .4
30.3	Bn		I	4 40 33.61	+1.08	+ .02	+ .2	S	+20 26 56.6	+2.7	+1.0	+1.0
Feb. 2.5	M			7 53				N S	+16 15 44.8	−3.6	−1.0	−1.0
10.7	Bn		II	14 57 13.69	+ .77	+ .11	+1.8	S	−17 9 2.1	−3.3	− .6	.0
11.8	P		II	15 48 16.91	+ .91	+ .25	+3.7	S	−19 11 20.2	−3.2	−1.0	− .2
26.2	Bn		I	4 20 30.76	+1.12	+ .04	+1.6	S	+19 51 56.6	+2.7	+ .7	+ .6
27.3	P		I	5 23 15.90	+1.24	+ .14	+1.8	S	+20 24 42.9	−1.6	−2.0	−2.1
Mar. 1.4	Bn		I	8 27 5.15	+1.02	− .02	− .1	N	+14 4 55.3	−3.9	− .2	− .1
2.4	Ry	W		9 24				N S	+ 9 57 19.9	−4.5	− .1	− .2

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1920				h m s	s	s	''		° ' ''	''	''	''
Mar. 3.5	P	W		10 19				N S	+ 5 19 13.9	−4.6	+0.1	+0.2
9.7	M		II	15 26 54.44	+0.94	+0.27	+3.9	S	−18 10 59.4	−3.0	− .6	+ .4
24.2	M		I	4 1 25.01	+1.02	.00	.0	S	+19 12 33.4	+3.5	+1.1	+1.0
25.2	Bn		I	5 4 31.40	+1.02	− .05	− .8	S	+20 10 30.7	+ .1	− .8	− .7
26.2	M			6 7				N	+19 44 25.9	+ .1	+1.0	+1.0
27.3	Bn	W	I	7 8 48.32	+ .98	− .11	−1.7	N	+17 58 47.8	−1.1	+1.3	+1.2
30.4	Ry	E	I	9 58 37.40	+ .92	− .08	−1.0	N	+ 6 59 4.3	−4.8	+ .3	.0
31.4	P		I	10 50 58.40	+ .98	+ .04	+ .3	N	+ 2 20 23.4	−4.1	+1.1	+1.4
Apr. 2.4	Ry			12 33				S	− 6 50 3.9	−4.1	+ .6	+ .2
5.6	Ry		II	15 5 32.64	+ .83	+ .13	+1.7	S	−17 8 53.6	−2.4	+ .5	+1.0
7.6	P		II	16 49 35.18	+ .88	+ .22	+3.0	S	−20 0 9.8	− .2	+1.2	+1.6
10.7	P		II	19 24 47.67	+ .84	+ .18	+2.5	N	−17 13 43.8	+2.0	+ .3	− .1
22.2	Bn		I	5 45 50.09	+1.05	.00	.0		+19 56			
23.2	P		I	6 49 19.02	+1.02	− .03	− .4	N	+18 33 39.3	−1.2	+ .6	+ .6
24.2	M		I	7 50 4.50	+ .93	− .12	−1.6	N	+15 57 37.6	−3.4	.0	− .2
28.3	P		I	11 25 18.28	+ .95	+ .03	+ .3	N	− 0 52 12.1	−4.5	+ .9	+1.2
29.4	Bn		I	12 15 13.79	+ .81	− .08	−1.0	N	− 5 21 33.2	−4.7	+ .4	+ .1
May 1.5	P			13 55				N S	−13 11 38.4	−4.7	− .6	− .9
3.5	Ry			15 38				N S	−18 24 15.2	−2.8	− .2	− .1
4.6	M			16 30				N S	−19 42 53.9	−2.1	− .2	− .2
5.6	P			17 22				N S	−20 4 37.6	− .4	+ .6	+ .6
6.6	Ry			18 14				N	−19 29 15.4	− .8	− .7	− .6
8.7	P		II	19 55 45.97	+ .82	+ .22	+3.1	N	−15 38 44.6	+2.1	+ .1	− .5
22.2	P		I	8 27 36.37	+ .98	.00	+ .2	N	+13 46 32.3	−3.9	− .3	− .1
25.3	Ry		I	11 9 59.08	+ .87	.00	+ .1	N	+ 0 32 56.5	−4.7	+ .3	+ .4
26.3	P		I	12 0 4.09	+ .84	− .04	− .5	N	− 3 59 57.1	−4.6	+ .4	+ .3
27.3	Bn		I	12 49 33.95	+ .80	− .04	− .7	N	− 8 15 49.5	−4.2	+ .5	+ .4
28.4	Ry		I	13 39 10.15	+ .80	− .02	− .2	N	−12 4 39.4	−4.0	+ .3	+ .4
29.4	P		I	14 29 21.39	+ .82	+ .04	+ .6	N	−15 17 21.8	−3.8	.0	+ .2
June 1.5	Bn			17 4				N S	−20 5 16.4	− .8	+ .8	+ .7
5.6	P		II	20 28 21.09	+ .76	+ .19	+2.7	N	−13 47 10.8	+2.2	.0	− .8
7.7	M		II	22 6 0.89	+ .54	− .02	− .6	N	− 6 20 47.1	+3.2	− .7	− .7
9.7	Ry		II	23 45 13.36	+ .65	+ .05	+ .1	N	+ 2 35 19.3	+4.0	− .9	−1.2
10.7	M		II	0 37 30.79	+ .74	+ .10	+1.3		+ 7 11			
11.8	P		II	1 32 49.79	+ .80	+ .08	+1.1		+11 34			
21.2	Bn			10 52				N	+ 2 21 22.9	−5.1	− .4	− .5
25.3	Ry		I	14 13 36.65	+ .75	− .03	− .8	N	−14 15 11.2	−2.5	+1.2	+1.1
26.4	P		I	15 4 10.65	+ .82	+ .06	+ .9	N	−16 59 15.2	−3.0	+ .1	+ .6
28.4	M		I	16 47 18.09	+ .72	.00	+ .1	N	−19 56 25.8	−1.5	+ .3	+ .2
29.4	P			17 39				N S	−20 1 44.7	−2.1	−1.1	−1.1
July 1.5	Ry		II	19 22 24.86	+ .79	+ .17	+2.2	N	−17 25 21.6	+0.1	− .8	−1.2
3.6	P		II	21 2 1.46	+ .58	+ .02	+ .2	N	−11 36 53.5	+2.8	+ .2	+ .1
8.7	P		II	1 10 59.28	+ .56	− .03	− .9	N	+ 9 42 48.7	+3.8	− .5	− .3
20.2	M		I	12 14 18.77	+ .82	− .01	− .2		− 4 53			
21.2	M		I	13 5 28.85	+ .86	+ .06	+1.4	N	− 9 10 40.3	−5.1	−1.2	− .6
22.2	Bn		I	13 56 13.53	+ .79	+ .02	+ .5	N	−12 54 26.3	−4.0	− .5	− .3
26.3	Ry		I	17 21 57.07	+ .73	+ .03	+ .4		−19 59			
27.4	M			18 14				N S	−19 29 32.2	+ .4	+ .6	+ .6
28.4	M			19 5				N S	−18 4 34.4	+1.9	+1.1	+1.1
29.5	Bn			19 56				N S	−15 48 39.0	+1.1	− .6	− .6
30.5	Ry		I II	20 46 14.20	+ .66	+ .04	+ .5		−12 48			
Aug. 2.6	P		II	23 13 29.17	+ .63	+ .09	+ .6	N	− 0 42 45.2	+3.1	−1.0	−1.5
3.6	P	E	II	0 3 17.12	+ .59	+ .05	+ .2	N	+ 3 46 5.3	+3.7	− .5	− .8
25.3	Ry	W		19 38				N S	−16 37 26.5	+2.3	+ .6	+ .6
26.4	Bn	W		20 28				N S	−13 54 43.4	+3.0	+ .3	+ .3

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1920				h m s	s	s	″		° ′ ″	″	″	″
Sept. 1.6	Ry	W	II	1 32 5.47	+0.45	−0.17	−2.7	N	+10 50 24.8	+3.6	−0.4	+0.5
2.6	M		II	2 27 42.05	+ .45	− .19	−2.6	N	+14 29 17.0	+4.2	+1.0	+1.6
3.7	M		II	3 25 52.28	+ .56	− .12	−1.8	N	+17 19 54.8	+2.6	+ .2	+ .5
4.7	Bn		II	4 26 25.20	+ .71	− .02	− .3	N	+19 7 9.1	+1.5	+ .1	+ .1
16.2	Ry		I	14 56 39.13	+ .95	+ .25	+3.4		−15 57			
17.2	Ry		I	15 49 18.52	+ .78	+ .09	+1.2		−18 5			
18.2	P		I	16 41 52.35	+ .67	− .01	.0	N	−19 17 4.5	−2.2	−1.0	−1.0
20.3	P		I	18 25 55.93	+ .99	+ .32	+4.5	S	−18 52 16.0	+2.1	+1.6	+1.4
21.3	M		I	19 17 3.07	+ .82	+ .16	+2.4	S	−17 19 6.4	+2.7	+1.3	+1.0
22.3	M		I	20 7 29.54	+ .83	+ .18	+2.2	S	−14 57 16.2	+1.8	− .7	−1.2
25.4	P		I	22 36 48.70	+ .69	+ .07	+ .6	S	− 4 1 45.5	+4.0	− .6	−1.0
Oct. 1.6	M		II	4 7 55.64	+ .73	− .01	− .2	N	+18 32 36.4	+2.3	+ .4	+ .4
2.7	Ry			5 10				N	+19 27 51.1	+1.1	+ .5	+ .5
4.7	P		II	7 14 7.07	+ .74	− .05	− .7	S	+17 21 33.8	−1.8	+ .1	.0
5.7	Bn		II	8 14 0.65	+ .61	− .18	−2.7	S	+14 31 36.5	−2.1	+ .9	+ .4
6.8	Ry		II	9 11 49.68	+ .70	− .09	−1.7	S	+10 48 0.6	−1.5	+2.3	+2.0
16.2	Ry		I	17 12 24.03	+ .81	+ .13	+1.8		−19 26			
19.2	Ry		I	19 46 21.41	+ .77	+ .11	+1.7	S	−15 55 42.7	+3.3	+1.3	+1.0
20.3	Bn		I	20 35 56.60	+ .76	+ .11	+1.2	S	−13 10 34.3	+2.2	− .9	−1.3
21.3	M		I	21 25 2.34	+ .81	+ .17	+2.2	S	− 9 47 25.3	+3.8	− .1	− .9
22.3	Ry		I	22 14 8.04	+ .68	+ .05	+ .5	S	− 5 53 15.5	+4.6	.0	− .3
23.3	Bn		I	23 3 51.37	+ .64	+ .01	+ .4	S	− 1 36 16.3	+6.3	+1.2	+1.0
25.4	Bn		I	0 48 0.46	+ .67	+ .03	+ .3	S	+ 7 22 2.8	+5.6	+ .5	+ .3
26.4	P			1 44				N S	+11 33 48.4	+4.3	− .7	− .6
Nov. 3.7	Ry		II	9 50 35.33	+ .65	− .12	−2.4	S	+ 7 48 31.0	−1.3	+2.9	+2.3
4.8	P		II	10 44 24.49	+ .73	− .02	− .8	S	+ 3 18 8.2	−2.4	+2.0	+1.9
5.7	Bn		II	11 36 50.67	+ .49	− .25	−3.5		− 1 18			
18.3	M		I	21 52 48.84	+ .74	+ .07	+ .6	S	− 7 40 2.3	+3.6	− .8	−1.2
19.3	Ry		I	22 41 8.49	+ .68	+ .02	− .2	S	− 3 37 20.6	+4.3	− .7	− .8
20.3	Bn		I	23 30 23.52	+ .63	− .04	− .4	S	+ 0 42 6.7	+6.3	+ .9	+ .9
25.5	M	W	I II	4 16 43.45	+ .86	+ .03	+ .4		+18 44			
1921												
Jan. 3.8	Bn	E	II	15 23 7.19	+ .63	− .02	− .3		−16 54			
17.3	Ry		I	2 15 22.08	+ .92	+ .01	− .2	S	+13 13 39.7	+4.7	− .1	− .2
18.3	P		I	3 12 30.58	+1.04	+ .07	+ .7	S	+16 17 32.8	+3.7	− .1	− .4
19.3	P		I	4 13 21.96	+1.09	+ .06	+ .5	S	+18 26 1.2	+1.4	−1.1	−1.2
23.5	Ry		I II	8 34 31.24	+1.02	+ .03	+ .4		+13 35			
24.6	Bn		II	9 36 38.41	+ .90	− .03	− .5	S	+ 9 20 37.5	−3.4	+ .9	+ .8
27.6	M		II	12 27 16.11	+ .76	.00	+ .7	S	− 5 4 27.2	−5.4	−1.6	−1.3
Feb. 14.2	M		I	2 52 12.61	+1.04	+ .07	+ .8	S	+15 2 15.9	+4.5	+ .4	+ .1
15.2	P		I	3 49 42.81	+1.14	+ .09	+1.0	S	+17 28 55.3	+2.3	− .6	− .9
16.3	Bn		I	4 50 9.67	+1.15	+ .03	+ .3	S	+18 53 52.0	+ .8	− .5	− .6
17.3	Bn		I	5 52 56.66	+1.36	+ .21	+2.9		+19 4			
18.4	M			6 57				N S	+17 53 4.1	−1.9	+ .2	+ .2
25.6	Ry			13 50				S	−11 12 26.1	−4.7	−1.4	−1.3
Mar. 3.7	P		II	19 7 2.30	+ .81	+ .18	+2.5		−17 30			
15.2	P		I	4 30 54.29	+1.12	+ .04	+ .4	S	+18 22 44.6	+1.7	− .1	− .2
16.2	Bn		I	5 31 33.05	+1.22	+ .08	+1.0	S	+18 58 6.6	− .7	− .8	− .9
18.3	Ry		I	7 35 0.73	+1.19	+ .01	+ .1	N	+16 23 13.5	−2.5	+ .9	+1.0
21.4	P		I	10 33 51.49	+1.10	+ .04	+ .5	N	+ 4 47 52.5	−5.2	+ .6	+ .9
22.5	M			11 31				N S	− 0 2 7.1	−6.5	− .9	− .8
25.6	Ry		II	14 17 56.88	+ .87	+ .03	+ .8	S	−12 53 47.3	−4.3	− .9	− .6
26.6	Bn	E	II	15 13 2.08	+ .86	+ .08	+1.1	S	−15 48 27.5	−2.1	+ .4	+ .8
Apr. 12.2	P	W	I	5 13 12.50	+1.17	+ .08	+1.1		+18 51			
15.3	M	W	I	8 16 9.65	+1.15	− .01	− .3	N	+14 22 30.0	−3.2	+1.2	+1.2

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1921				h m s	s	s	''		° ' ''	''	''	''
Apr. 18.4	P	W	I	11 7 34. 16	+1. 01	−0. 06	−0. 8	N	+ 1 55 39. 1	−5. 8	+0. 3	+0. 1
19.4	M		I	12 2 37. 26	+1. 05	+ . 02	+ . 5	N	− 2 46 1. 8	−5. 9	− . 1	+ . 2
20.4	Ry		I	12 57 24. 75	+ . 88	− . 10	−1. 2	N	− 7 14 55. 3	−5. 2	− . 1	− . 5
21.5	Ry		I II	13 52 18. 59	+ . 92	. 00	. 0		−11 15			
25.6	Ry			17 32				N S	−18 53 51. 0	− . 1	+ . 4	+ . 4
May 10.2	P		I	5 53 43. 55	+1. 23	+ . 13	+1. 8		+18 50			
14.2	Ry		I	9 54 44. 05	+ . 95	− . 14	−2. 1	N	+ 7 56 14. 3	−4. 9	+ . 8	+ . 1
16.3	P		I	11 44 18. 02	+ . 91	− . 13	−1. 8	N	− 1 9 45. 6	−5. 5	+ . 5	− . 2
17.3	M		I	12 37 54. 74	+ . 98	− . 02	− . 2	N	− 5 39 33. 4	−5. 5	+ . 1	+ . 2
18.3	Ry		I	13 31 32. 60	+ . 92	− . 04	− . 4	N	− 9 47 25. 2	−4. 9	− . 1	− . 1
19.4	Ry		I	14 25 34. 20	+ . 84	− . 08	− . 9	N	−13 20 14. 4	−4. 3	− . 3	− . 5
20.4	P		I	15 20 5. 06	+ . 78	− . 08	−1. 1	N	−16 6 55. 0	−3. 4	− . 4	− . 6
21.5	Bn			16 15				N S	−17 59 15. 7	−2. 7	− . 6	− . 7
26.6	P		II	20 36 21. 00	+ . 51	− . 06	− . 8	N	−13 22 22. 8	+2. 7	+ . 4	+ . 5
31.6	P		II	0 36 23. 31	+ . 66	+ . 01	+ . 1		+ 5 28			
June 10.2	M		I	9 36 30. 30	+ . 88	− . 22	−3. 1		+ 9 28			
14.3	M		I	13 15 10. 95	+ . 86	− . 11	−1. 5	N	− 8 26 47. 9	−4. 8	+ . 2	− . 3
15.3	M		I	14 8 18. 82	+ . 78	− . 15	−2. 2	N	−12 10 29. 7	−4. 1	+ . 9	+ . 3
20.5	Ry		II	18 36 31. 95	+ . 80	+ . 12	+1. 7	N	−18 19 52. 0	+1. 1	+ . 9	+ . 7
21.6	M		II	19 28 10. 57	+ . 72	+ . 09	+1. 4	N	−16 48 48. 7	+2. 5	+1. 4	+1. 2
24.7	Ry		II	21 54 31. 06	+ . 41	− . 10	−1. 6	N	− 8 14 41. 5	+2. 9	− . 2	+ . 2
26.7	M		II	23 28 20. 22	+ . 62	+ . 11	+1. 4	N	− 0 31 11. 8	+4. 3	+ . 4	− . 4
27.6	Bn		II	0 16 4. 31	+ . 67	+ . 13	+1. 8	N	+ 3 32 59. 6	+3. 8	− . 6	− . 6
July 14.3	Ry		I	15 39 18. 94	+ . 70	− . 16	−2. 1	N	−16 40 8. 3	−3. 0	− . 6	−1. 0
16.4	Bn		I	17 26 19. 74	+ . 74	− . 03	− . 4	N	−18 54 29. 0	−1. 0	− . 3	− . 3
17.4	M		I	18 19 10. 38	+ . 84	+ . 10	+1. 4	N	−18 36 57. 3	. 0	− . 1	− . 1
18.4	M		I	19 11 1. 53	+ . 73	+ . 04	+ . 4	N	−17 25 58. 3	+ . 3	− . 6	− . 7
19.4	Ry		I II	20 1 35. 85	+ . 69	+ . 03	+ . 5		−15 27			
20.5	Bn		II	20 50 47. 87	+ . 58	− . 02	− . 4	N	−12 47 18. 9	+2. 3	. 0	. 0
21.6	Ry		II	21 38 45. 78	+ . 44	− . 13	−1. 9	N	− 9 35 2. 1	+3. 0	+ . 1	+ . 6
23.6	Bn		II	23 12 32. 33	+ . 52	+ . 01	− . 2	N	− 2 6 16. 6	+3. 3	− . 4	− . 5
Aug. 8.2	P		I	13 33 2. 39	+ . 96	. 00	+ . 6	N	− 9 16 24. 5	−5. 4	−1. 2	−1. 0
9.2	Bn		I	14 27 44. 73	+ . 96	+ . 03	+ . 8	N	−12 54 1. 6	−4. 3	−1. 0	− . 7
10.3	Bn		I	15 22 3. 24	+ . 76	− . 13	−1. 5	N	−15 43 13. 9	−3. 3	− . 8	−1. 2
15.4	P			19 45				N S	−16 6 28. 9	+2. 6	+ . 8	+ . 8
18.5	Ry		II	22 10 51. 89	+ . 44	− . 17	−2. 9	N	− 7 14 38. 4	+2. 5	−1. 1	− . 2
19.5	Ry		II	22 57 50. 81	+ . 56	− . 03	− . 7	N	− 3 28 1. 3	+3. 3	− . 6	− . 5
21.6	Ry		II	0 32 23. 07	+ . 48	− . 10	−1. 4	N	+ 4 27 1. 3	+4. 4	+ . 2	+ . 6
22.6	Ry		II	1 21 10. 95	+ . 45	− . 15	−2. 1	N	+ 8 16 44. 0	+4. 4	+ . 4	+1. 2
23.7	P		II	2 11 51. 77	+ . 43	− . 20	−3. 0	N	+11 47 28. 9	+3. 2	− . 4	+ . 6
24.7	P		II	3 4 59. 99	+ . 51	− . 18	−2. 7	N	+14 47 33. 7	+2. 9	− . 1	+ . 6
26.7	Bn		II	4 59 49. 81	+ . 93	+ . 12	+1. 6	N	+18 23 22. 5	+1. 3	+ . 4	+ . 2
Sept. 7.2	Bn		I	15 55 44. 04	+ . 81	− . 02	− . 2	N	−16 49 33. 4	−2. 2	− . 5	− . 5
8.2	Ry		I	16 50 30. 83	+ . 80	. 00	. 0	N	−18 11 10. 7	− . 9	− . 1	− . 1
12.3	M		I	20 18 14. 47	+ . 78	+ . 10	+1. 4	S	−14 29 17. 9	+2. 8	+ . 3	− . 1
13.4	P		I	21 6 59. 86	+ . 69	+ . 04	+ . 3	S	−11 42 34. 1	+2. 9	− . 3	− . 5
14.4	Bn			21 55				S	− 8 25 13. 1	+2. 9	−1. 0	− . 9
15.5	Bn			22 42				N S	− 4 45 12. 5	+3. 6	− . 7	− . 7
22.7	M		II	4 40 26. 99	+ . 80	− . 04	− . 7	N	+17 56 23. 4	+1. 4	. 0	+ . 1
23.7	Ry			5 40				N S	+18 30 27. 6	− . 3	− . 2	− . 2
Oct. 5.2	Ry		I	16 26 46. 14	+ . 73	− . 05	− . 6		−17 38			
6.2	P		I	17 22 16. 63	+ . 86	+ . 11	+1. 5		−18 26			
7.2	P		I	18 16 22. 65	+ . 84	+ . 11	+1. 6	S	−18 15 42. 3	+ . 6	. 0	. 0
8.3	Ry	W	I	19 8 50. 01	+ . 85	+ . 15	+2. 4	S	−17 10 44. 0	+3. 1	+1. 7	+1. 4
14.4	P	E	I	23 59 22. 32	+ . 65	+ . 03	+ . 6	S	+ 1 40 27. 9	+5. 7	+ . 8	+ . 5

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1921				h m s	s	s	″		° ′ ″	″	″	″
Oct. 17.5	Bn	E		2 31				N S	+12 49 46.9	+3.1	−1.0	−0.9
21.6	Ry		II	6 21 35.04	+0.98	+0.02	+0.2	S	+18 12 15.2	+ .3	+1.2	+1.2
22.7	Ry		II	7 21 44.04	+ .99	+ .02	+ .4	S	+16 47 24.1	−2.9	− .4	− .3
24.7	Ry		II	9 20 2.57	+ .96	+ .02	+ .1	S	+10 49 18.2	−3.6	+1.2	+1.4
25.7	M		II	10 17 43.22	+ .83	− .08	−1,4	S	+ 6 39 36.1	−4.5	+ .8	+ .4
Nov. 5.2	Bn		I	19 38 41.44	+ .84	+ .16	+2.6	S	−16 13 36.5	+3.9	+2.2	+1.8
7.2	M		I	21 17 37.69	+ .75	+ .11	+1.4	S	−11 1 44.8	+2.9	− .4	− .9
10.3	Bn		I	23 39 20.76	+ .65	+ .05	+1.0	S	− 0 2 43.8	+6.0	+1.2	+ .7
12.4	Ry		I	1 17 8.61	+ .61	− .02	− .3	S	+ 7 51 44.9	+5.2	+ .4	+ .4
15.4	Ry			4 1				N S	+16 57 41.6	+2.3	− .4	− .4
Dec. 3.2	P		I	20 8 1.19	+ .85	+ .15	+2.1		−15 9			
7.2	P		I	23 19 20.11	+ .65	+ .02	+ .5	S	− 1 55 4.2	+5.8	+1.1	+ .8
9.3	M		I	0 54 30.87	+ .65	− .01	+ .1	S	+ 5 57 41.8	+5.6	+ .7	+ .6
15.5	P		II	6 37 52.71	+ .91	+ .02	+ .4	S	+18 8 43.3	−1.7	−1.0	−1.0
19.7	P		II	10 39 44.37	+ .84	− .03	+ .1	S	+ 5 17 38.2	−5.8	−1.1	−1.0
21.7	M	E	II	12 30 21.44	+ .79	− .06	− .4	S	− 3 53 54.6	−5.6	−1.0	−1.1
1922												
Jan. 6.3	Bn	W	I	1 22 30.11	+ .81	+ .07	+ .9	S	+ 7 50 46.5	+5.2	+ .3	− .2
7.3	Bn		I	2 12 50.70	+ .80	+ .01	+ .1		+11 23			
9.4	P		I	4 2 38.38	+ .99	+ .08	+ .7	S	+16 50 15.5	+1.2	−1.7	−1.9
10.4	Ry		I	5 2 34.01	+1.06	+ .11	+1.4	S	+18 16 25.2	+ .8	− .7	− .8
12.5	Ry		I	7 9 20.45	+1.04	+ .06	+ .9	S	+17 27 16.6	−2.3	− .6	− .4
14.6	M		II	9 16 10.57	+ .98	+ .08	+1.4	S	+11 35 36.5	−4.6	− .6	− .1
31.2	M		I	23 31 10.60	+ .70	+ .03	+ .4		− 1 27			
Feb. 2.2	Bn		I	1 4 33.73	+ .74	+ .01	− .1	S	+ 6 11 53.0	+4.5	− .2	− .3
3.2	Ry		I	1 53 2.00	+ .85	+ .05	+ .5	S	+ 9 46 31.2	+4.3	− .3	− .6
6.3	P		I	4 33 27.36	+1.10	+ .05	+ .5	S	+17 30 14.7	+1.2	−1.0	−1.1
8.3	Ry			6 35				N S	+18 4 15.1	−2.4	−1.3	−1.3
13.6	Ry		II	11 46 15.63	+ .94	+ .06	+1.8	S	+ 0 14 29.5	−6.7	−2.0	−1.3
Mar. 3.2	Ry		I	2 26 26.62	+ .72	− .07	−1.1		+11 47			
5.2	Ry		I	4 11 46.71	+1.01	+ .01	+ .2	S	+16 43 33.1	+2.8	+ .2	+ .1
6.2	P		I	5 8 14.47	+1.09	− .01	− .2	S	+17 59 28.0	+1.3	+ .2	+ .2
8.3	Ry		I	7 7 43.25	+1.25	+ .03	+ .5	N	+17 16 51.2	−2.4	.0	+ .1
12.4	Ry			11 14				N S	+ 2 58 4.2	−6.9	−1.0	− .9
13.4	M		II	12 13 41.01	+1.00	.00	+ .4	S	− 1 58 5.0	−6.3	−1.0	− .8
15.6	Ry		II	14 12 19.59	+ .91	+ .06	+1.5	S	−10 52 26.1	−5.5	−2.2	−1.7
16.6	P		II	15 10 57.61	+ .69	− .08	−1.0	S	−14 13 48.3	−2.8	− .6	− .8
17.7	Bn		II	16 8 56.08	+ .75	+ .04	+ .7	S	−16 36 13.3	−2.4	−1.3	−1.1
22.7	Bn	W	II	20 37 34.40	+ .61	+ .06	+ .9		−13 46			
Apr. 12.5	Ry	E		14 41				S	−12 36 44.6	−5.1	−1.6	−1.6
15.6	P			17 38				N S	−18 13 34.6	+ .3	+ .2	+ .2
May 1.2	P		I	6 27 41.03	+1.24	+ .17	+2.5		+18 5			
2.2	M		I	7 26 23.52	+1.02	− .09	−1.2	N	+16 49 12.8	−3.3	− .6	− .7
6.3	Bn		I	11 17 44.76	+1.11	.00	− .2	N	+ 2 41 52.6	−5.7	+ .7	+ .8
8.3	M		I	13 12 45.82	+ .96	− .10	−1.1	N	− 6 38 13.7	−5.9	− .4	− .8
9.4	P		I	14 11 20.07	+ .99	− .03	− .6	N	−10 48 50.2	−4.1	+ .4	+ .3
10.4	Bn		I II	15 10 41.34	+ .97	.00	− .1		−14 15			
15.6	Bn		II	19 57 45.95	+ .71	+ .10	+1.6	N	−15 46 35.2	+2.9	+1.0	+ .7
19.7	Ry		II	23 12 28.49	+ .46	− .04	.6	N	− 8 12 33.1	+3.8	.0	+ .1
29.2	P		I	7 7 58.72	+ .98	− .13	−1.8		+17 29			
June 6.3	P		I	14 45 54.62	+1.02	+ .02	+ .2		−12 52			
7.4	Ry		I	15 44 18.80	+ .82	− .14	−2.0	N	−15 45 31.0	−2.3	+ .4	.0
10.5	P		II	18 39 4.67	+ .83	+ .06	+ .9	N	−18 6 35.9	+ .2	− .4	− .5
12.6	Bn		II	20 27 27.18	+ .63	+ .01	+ .3	N	−14 38 54.1	+2.9	+1.0	+ .8
15.6	M	E	II	22 53 57.02	+ .42	.05	.9	N	4 56 54.9	+3.0	− .3	.0

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to— Am. Eph.	Corr. to— Tab. R. A.	Corr. to— Tab. Long.	Limb	App. Decl. of Center	Corr. to— Am. Eph.	Corr. to— Tab. Decl.	Corr. to— Tab. Lat.
1922				h m s	s	s	″		° ′ ″	″	″	″
June 30.2	Bn	W		11 40				N	+ 1 20 40.1	−7.2	−1.3	−1.2
July 5.4	Ry		I	16 21 38.52	+0.87	−0.07	−0.9	N	−16 58 56.6	−2.3	− .6	− .7
6.4	Ry		I	17 19 17.45	+ .87	− .02	− .2	N	−18 12 48.8	−1.2	− .5	− .5
7.5	Bn		I	18 16 24.16	+ .90	+ .06	+ .9	N	−18 22 22.9	+ .1	− .2	− .2
12.6	Bn		II	22 35 34.06	+ .54	+ .04	+ .7	N	− 6 37 31.6	+3.3	+ .5	+ .1
31.3	Bn		I	15 7 19.77	+ .80	− .19	−2.7	N	−13 39 18.3	−2.9	.0	− .7
Aug. 2.3	Ry		I	17 1 7.51	+ .78	− .13	−1.8	N	−17 47 16.7	−1.7	−1.0	−1.2
4.4	Bn			18 53				N S	−17 50 56.3	+1.8	+ .7	+ .7
5.4	P			19 47				N S	−16 26 20.0	+1.5	− .3	− .2
9.6	M	W	II	23 5 20.59	+ .54	+ .03	+ .8	N	− 4 25 43.1	+4.2	+1.0	+ .6
28.2	Bn	E	I	15 46 5.70	+ .84	− .12	−1.5	N	−15 19 58.1	−2.7	− .8	−1.0
29.3	M		I	16 43 40.87	+ .82	− .10	−1.4	N	−17 15 25.1	−1.8	−1.0	−1.2
30.3	Ry		I	17 40 31.21	+ .85	− .02	− .3	N	−18 8 0.8	+ .1	− .2	− .2
Sept. 5.4	M		I II	22 49 23.92	+ .57	− .01	− .2		− 5 43			
6.5	M		II	23 36 4.13	+ .59	+ .05	+ .3	N	− 1 59 9.7	+2.9	− .8	−1.1
12.7	P		II	4 28 5.59	+ .61	− .05	− .8	N	+16 47 14.0	+1.7	.0	+ .1
13.7	M		II	5 23 2.12	+ .83	+ .10	+1.4	N	+17 55 35.5	+1.0	+ .4	+ .3
15.7	Ry		II	7 19 1.87	+ .98	+ .12	+1.7		+17 9			
25.2	P		I	16 21 44.19	+ .77	− .13	−1.8		−16 35			
26.2	M		I	17 20 28.93	+ .88	+ .02	+ .3	N	−17 53 24.2	− .1	− .1	− .1
27.2	Ry		I	18 17 42.45	+ .86	+ .04	+ .7	S	−18 5 46.6	+1.9	+1.0	+1.0
28.3	Ry		I	19 12 59.02	+ .86	+ .10	+1.7	S	−17 17 42.2	+4.0	+2.2	+2.0
29.3	M		I	20 6 6.09	+ .75	+ .04	+ .5	S	−15 37 11.5	+1.9	− .6	− .8
30.3	P		I	20 57 6.56	+ .69	+ .03	+ .3	S	−13 13 14.5	+2.6	− .4	− .5
Oct. 2.4	P		I	22 33 58.86	+ .56	− .03	− .2	S	− 6 52 11.9	+4.3	+ .6	+ .6
5.5	Ry		I II	0 53 39.45	+ .60	+ .06	+ .8		+ 4 20			
12.7	P		II	6 56 34.87	+ .81	− .03	− .4	S	+17 40 18.3	− .7	+ .8	+ .8
24.2	P		I	17 53 39.36	+ .88	+ .09	+1.2		−18 13			
26.2	Bn		I	19 46 43.62	+ .77	+ .08	+1.5	S	−16 25 16.7	+4.3	+2.3	+2.0
27.2	M		I	20 39 20.46	+ .76	+ .11	+1.4	S	−14 13 50.4	+2.2	− .5	− .9
28.3	P		I	21 29 33.80	+ .64	+ .03	+ .5	S	−11 24 50.7	+3.4	+ .3	.0
30.3	P		I	23 4 53.55	+ .59	+ .04	+ .8	S	− 4 32 48.8	+4.4	+ .6	+ .2
Nov. 3.4	P		I	2 12 47.68	+ .57	− .02	− .4	S	+10 11 45.1	+3.9	− .1	.0
8.6	Ry		II	6 39 4.70	+ .87	.00	− .1	S	+18 5 7.5	+ .2	+1.1	+1.1
9.7	P		II	7 35 58.85	+ .93	+ .04	+ .3	S	+16 52 29.7	− .2	+2.0	+2.1
11.7	P		II	9 29 51.72	+ .85	− .04	− .2	S	+11 30 31.7	−5.3	− .9	− .9
23.2	Bn		I	20 17 21.70	+ .74	+ .08	+1.0	S	−15 27 11.2	+1.3	− .8	−1.1
24.2	M			21 10				S	−12 49 28.0	+2.6	.0	.0
27.3	P		I	23 34 4.95	+ .54	+ .02	+ .7	S	− 2 23 10.9	+4.9	+1.2	+ .9
28.3	M		I	0 20 19.19	+ .55	+ .03	+ .9	S	+ 1 26 32.4	+5.1	+1.2	+ .8
29.3	Ry		I	1 6 52.20	+ .53	.00	+ .3	S	+ 5 13 38.1	+4.9	+ .9	+ .7
30.4	Ry		I	1 54 26.20	+ .63	+ .08	+1.2	S	+ 8 49 57.2	+4.3	+ .3	− .2
Dec. 3.4	Ry	E	I II	4 28 15.01	+ .76	+ .03	+ .4		+16 57			
1923												
Jan. 6.6	P	W	II	10 48 43.59	+ .43	− .04	+ .2	S	+ 6 26 42.3	−4.1	−1.9	−2.1
10.8	Bn		II	14 33 16.95	+ .47	− .01	+1.2	S	−11 8 59.9	−6.0	−4.2	−4.1
11.8	M		II	15 31 8.03	+ .46	− .03	− .4		−14 28			
22.2	P		I	0 29 14.82	+ .35	− .04	− .5	S	+ 1 38 12.3	+1.9	.0	+ .4
25.3	Ry		I	2 51 10.93	+ .48	+ .06	+ .9	S	+12 8 25.5	+1.5	.0	− .2
29.3	M		I	6 27 23.55	+ .55	+ .06	+ .9	S	+18 18 38.9	−2.0	−1.8	−1.7
30.5	P			7 27				N S	+17 24 15.1	.0	+ .8	+ .8
Feb. 19.2	P		I	0 57 35.77	+ .40	+ .01	+ .2		+ 3 49			
21.2	Ry		I	2 31 47.03	+ .35	− .05	−1.0	S	+10 46 6.9	+ .6	−1.0	− .6
22.2	Ry		I	3 20 40.50	+ .40	− .01	− .5	S	+13 39 16.0	.0	−1.4	−1.2
23.3	Ry	W	I	4 11 26.75	+ .39	− .05	− .8	S	+15 57 40.2	− .2	−1.1	− .9

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1923				h m s	s	s	″		° ′ ″	″	″	″
Mar. 1.4	Bn	W		9 56				N S	+10 24 51.8	−3.1	−1.1	−1.0
2.5	Bn		I II	10 55 24.67	+0.53	+0.03	+0.5		+ 6 6			
21.2	Ry		I	3 2 57.19	+ .48	+ .08	+1.1		+12 40			
24.2	Bn		I	5 37 8.48	+ .44	− .01	− .2	S	+18 4 3.8	−1.2	−1.5	−1.5
27.3	P		I	8 26 11.58	+ .44	− .04	− .4	N	+15 20 6.8	−2.1	− .9	−1.1
28.3	Ry		I	9 24 34.59	+ .46	− .03	− .5	N	+12 21 43 8	−1.4	+ .3	.0
29.4	Bn		I	10 23 28.48	+ .50	+ .01	+ .2	N	+ 8 29 26.4	−2.0	+ .2	+ .1
31.5	Ry			12 23				N S	− 0 57 38.3	−2.8	− .3	− .3
Apr. 6.7	Ry		II	18 29 17.72	+ .49	.00	.0	N	−18 14 28.2	−1.2	−1.4	−1.4
20.2	P		I	5 19 16.52	+ .52	+ .08	+1.1		+17 56			
24.3	P		I	8 59 55.06	+ .43	− .04	− .8	N	+13 52 0.3	− .9	+ .6	+ .3
27.4	P		I	11 51 44.35	+ .51	+ .02	+ .6	N	+ 1 39 31.0	−3.2	− .8	− .8
May 1.5	P			15 57				N S	−15 29 16.1	−2.6	−1.2	−1.2
2.6	Bn		II	17 0 19.54	+ .49	− .04	− .5	N	−17 36 21.6	− .8	− .1	− .2
3.6	M		II	18 2 58.89	+ .52	.00	.0	N	−18 26 6.3	− .3	− .2	− .2
4.6	Ry	W	II	19 3 33.43	+ .54	+ .04	+ .6	N	−18 1 13.6	+ .2	− .3	− .3
21.2	M	E	I	8 41 40.67	+ .36	− .10	−1.4		+15 0			
22.2	P		I	9 37 0.94	+ .50	+ .04	+1.0	N	+11 58 11.0	−2.8	−1.1	− .9
24.3	Bn		I	11 28 0.33	+ .53	+ .06	+1.0	N	+ 3 48 47.5	−2.6	− .3	− .1
25.3	M		I	12 24 29.87	+ .45	− .03	− .4	N	− 0 53 35.4	−2.3	+ .1	− .2
26.3	Ry		I	13 22 24.74	+ .50	+ .01	− .1	N	− 5 38 58.1	−1.8	+ .5	+ .4
28.5	P		I	15 24 0.84	+ .42	− .11	−1.4	N	−13 55 9.6	−2.0	− .4	− .9
31.5	Ry		II	18 34 17.50	+ .61	+ .09	+1.4		−18 32			
June 1.6	Ry		II	19 35 2.15	+ .62	+ .12	+1.7	N	−17 32 22.1	+ .5	− .3	− .5
19.2	P		I	10 15 53.06	+ .49	+ .03	+ .5		+ 9 38			
20.2	Bn		I	11 10 40.61	+ .50	+ .04	+ .6		+ 5 29			
21.3	Bn		I	12 5 35.87	+ .43	− .03	− .2	N	+ 0 56 51.7	−2.8	− .5	− .8
25.4	Bn		I	15 58 20.65	+ .42	− .11	−1.4	N	−15 30 17.9	−1.6	− .2	− .6
30.6	P		II	21 2 30.30	+ .48	+ .02	+ .3	N	−14 15 12.9	+1.2	− .3	− .2
July 19.2	Ry		I	12 44 48.28	+ .43	− .03	− .4		− 2 7			
20.2	M		I	13 40 43.90	+ .43	− .04	− .1	N	− 6 39 18.5	−3.4	−1.2	−1.6
21.3	M		I	14 37 53.12	+ .52	+ .03	+ .9	N	−10 48 32.9	−3.2	−1.3	−1.2
25.4	Ry			18 39				N S	−18 32 14.4	+1.7	+1.5	+1.5
26.5	Ry			19 39				N S	−17 33 48.1	+ .4	− .4	− .4
27.5	Ry		I II	20 37 18.34	+ .55	+ .08	+1.2		−15 32			
Aug. 2.7	P		II	1 37 29.45	+ .31	− .08	−1.3	N	+ 6 19 7.3	+1.3	− .6	+ .1
5.7	P		II	4 2 49.83	+ .39	− .03	− .5		+15 29			
7.7	P		II	5 48 23.06	+ .48	+ .02	+ .4		+18 23			
20.3	P		I	17 18 21.42	+ .39	− .12	−1.6	N	−17 52 41.2	− .8	− .2	− .3
21.3	Ry			18 18				N S	−18 31 10.3	.0	.0	.0
22.4	Ry			19 18				N S	−17 59 36.0	+1.1	+ .5	+ .5
23.4	Ry		I	20 15 20.64	+ .55	+ .08	+ .8	S	−16 23 36.2	− .4	−1.5	−1.6
24.4	M		I	21 10 46.76	+ .48	+ .02	+ .3	S	−13 53 17.8	+1.4	.0	.0
27.6	Ry		II	23 43 44.38	+ .35	− .05	− .9	N	− 3 6 56.0	+1.3	− .7	− .1
30.6	M		II	2 5 49.12	+ .36	− .04	− .6	N	+ 8 23 39.9	+1.4	− .3	+ .1
31.6	Ry		II	2 53 32.12	+ .32	− .09	−1.1	N	+11 39 57.5	+2.0	+ .5	+ .9
Sept. 1.7	Bn		II	3 42 21.85	+ .33	− .08	−1.1	N	+14 26 21.4	+1.2	.0	+ .3
14.2	M		I	14 58 59.84	+ .35	− .15	−2.0		−12 1			
17.3	Bn		I	18 0 27.29	+ .52	+ .02	+ .4	N	−18 26 39.5	− .8	− .6	− .6
24.5	Ry		I II	0 13 46.55	+ .42	+ .02	+ .4		− 0 36			
25.5	Bn			1 1				N S	+ 3 20 14.1	+1.3	− .6	− .6
28.6	Ry		II	3 23 52.27	+ .29	− .12	−1.6	N	+13 30 51.4	+1.3	− .1	+ .4
29.6	Bn		II	4 13 21.11	+ .48	+ .07	+ .9	N	+15 54 32.1	+ .7	− .3	− .4
Oct. 1.6	Ry		II	5 56 34.88	+ .53	+ .09	+1.2	S	+18 28 13.2	+ .1	− .1	− .1
2.7	P	E	II	6 50 18.76	+ .46	+ .01	+ .1	S	+18 25 52.5	− .5	− .2	− .2

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to— Am. Eph.	Corr. to— Tab. R. A.	Corr. to— Tab. Long.	Limb	App. Decl. of Center	Corr. to— Am. Eph.	Corr. to— Tab. Decl.	Corr. to— Tab. Lat.
1923				h m s	s	s	″		° ′ ″	″	″	″
Oct. 3.8	M	E	II	7 45 12. 79	+0. 42	−0. 04	−0. 6	S	+17 24 52. 4	−0. 4	+0. 3	+0. 2
4.8	P		II	8 41 0. 95	+ . 47	. 00	+ . 2	S	+15 23 45. 6	−2. 1	− . 8	− . 9
15.3	P		I	18 40 29. 93	+ . 56	+ . 06	+1. 0	S	−18 34 23. 3	+2. 0	+1. 8	+1. 8
17.3	Ry		I	20 36 11. 62	+ . 49	+ . 03	+ . 2	S	−15 40 16. 1	+ . 1	−1. 1	−1. 1
18.3	Ry		I	21 29 54. 27	+ . 47	+ . 04	+ . 3	S	−12 55 15. 2	+ . 8	− . 8	− . 8
20.4	M		I	23 10 18. 05	+ . 49	+ . 08	+1. 2	S	− 5 52 11. 5	+2. 0	+ . 1	− . 3
24.5	Ry			2 19				N S	+ 9 27 31. 2	+1. 1	− . 6	− . 5
26.5	P			3 56				N S	+15 17 0. 8	+ . 7	− . 4	− . 4
27.6	Bn			4 47				N S	+17 15 4. 6	+ . 1	− . 8	− . 8
29.6	M	E	II	6 30 53. 53	+ . 42	− . 02	− . 2	S	+18 44 15. 6	− . 8	− . 8	− . 8
Nov. 1.7	P	W	II	9 13 2. 78	+ . 36	− . 09	− . 8	S	+14 0 11. 2	−2. 8	−1. 3	−1. 8
2.8	Bn		II	10 7 59. 29	+ . 42	− . 04	+ . 1	S	+10 37 25. 4	−3. 7	−1. 8	−2. 0
13.2	M		I	20 15 55. 60	+ . 43	− . 05	−1. 0	S	−16 43 9. 4	− . 2	−1. 3	−1. 0
14.2	Bn		I	21 12 2. 34	+ . 47	+ . 01	+ . 1	S	−14 9 41. 8	+1. 2	− . 3	− . 2
17.3	Ry		I	23 43 16. 33	+ . 36	− . 03	− . 4	S	− 3 21 49. 3	+2. 1	+ . 1	+ . 4
19.4	M		I	1 16 51. 70	+ . 33	− . 06	− . 8	S	+ 4 33 7. 3	+1. 9	. 0	+ . 5
20.4	P		I	2 3 39. 46	+ . 33	− . 06	−1. 0	S	+ 8 16 18. 3	+1. 3	− . 5	. 0
22.5	Ry		I II	3 39 58. 13	+ . 40	− . 01	− . 2		+14 32			
24.5	P		II	5 21 33. 56	+ . 50	+ . 06	+ . 8	S	+18 17 19. 8	−1. 5	−2. 1	−2. 1
Dec. 1.7	M		II	11 35 56. 90	+ . 39	− . 07	. 0	S	+ 4 8 21. 2	−4. 5	−2. 2	−2. 6
3.7	P		II	13 28 1. 11	+ . 44	− . 05	− . 6		− 5 21			
12.2	P		I	21 43 46. 87	+ . 46	. 00	− . 4	S	−12 35 41. 5	+ . 2	−1. 5	−1. 3
14.2	M		I	23 26 18. 13	+ . 36	− . 05	− . 4	S	− 5 3 28. 4	+2. 6	+ . 6	+1. 0
15.3	Bn		I	0 14 14. 87	+ . 36	− . 04	− . 2	S	− 1 0 37. 0	+2. 5	+ . 5	+ . 9
17.3	Bn		I	1 47 46. 13	+ . 35	− . 04	− . 6	S	+ 6 50 39. 4	+1. 5	− . 3	+ . 1
18.3	M		I	2 34 52. 70	+ . 34	− . 06	− . 9	S	+10 23 13. 5	+1. 3	− . 4	+ . 1
19.4	P		I	3 23 2. 59	+ . 42	+ . 01	− . 1	S	+13 29 54. 4	+ . 3	−1. 2	−1. 1
1924												
Jan. 9.2	Bn		I	22 12 9. 44	+ . 42	− . 03	− . 4		−10 57			
11. 2	P		I	23 54 34. 12	+ . 39	− . 02	− . 3	S	− 2 56 35. 6	+2. 1	. 0	+ . 3
12.2	Ry		I	0 42 42. 43	+ . 34	− . 06	−1. 0	S	+ 1 10 47. 8	+1. 5	− . 5	+ . 1
14.3	M		I	2 17 1. 32	+ . 37	− . 03	− . 3	S	+ 8 52 28. 5	+1. 9	+ . 1	+ . 4
15.3	P		I	3 4 42. 96	+ . 40	− . 01	− . 4	S	+12 11 29. 5	+ . 4	−1. 1	− . 9
23.6	Ry		II	10 8 45. 09	+ . 46	+ . 01	+ . 8	S	+11 13 54. 4	−3. 5	−1. 7	−1. 7
Feb. 13.3	Ry		I	4 22 55. 75	+ . 42	. 00	− . 2	S	+16 14 8. 3	− . 7	−1. 7	−1. 6
16.3	Bn			7 0				N S	+18 46 35. 3	− . 1	+ . 2	+ . 2
23.6	M		II	13 27 38. 72	+ . 44	− . 02	− . 1	S	− 4 50 17. 0	−2. 9	− . 6	− . 9
27.7	Bn		II	17 22 45. 35	+ . 48	− . 03	− . 3	S	−18 9 41. 2	−1. 6	− . 9	−1. 0
Mar. 12.2	Ry		I	4 52 22. 87	+ . 37	− . 05	−1. 0	S	+17 21 35. 2	−1. 6	−2. 4	−2. 3
13.3	Ry		I	5 43 48. 88	+ . 50	+ . 07	+ . 9	S	+18 35 52. 6	−2. 0	−2. 4	−2. 4
14.3	M		I	6 36 29. 41	+ . 56	+ . 11	+1. 6	N	+18 57 23. 2	+ . 4	+ . 4	+ . 5
15.3	Bn			7 30				N	+18 21 49. 7	− . 7	− . 2	− . 2
17.4	P		I	9 19 50. 01	+ . 49	+ . 03	+ . 3	N	+14 14 37. 5	−1. 1	+ . 4	+ . 3
19.5	Bn		I	11 10 51. 88	+ . 45	− . 02	− . 4	N	+ 6 39 12. 4	−1. 7	+ . 5	+ . 2
27.7	P		II	19 6 54. 13	+ . 51	. 00	− . 2	N	−18 47 50. 3	−2. 0	−2. 4	−2. 3
29.8	M	W	II	21 3 29. 04	+ . 57	+ . 10	+1. 4		−15 8			
Apr. 8.2	P	E	I	4 32 43. 18	+ . 48	+ . 07	+1. 0		+16 48			
14.3	P		I	9 48 43. 81	+ . 48	+ . 02	+ . 2	N	+12 41 14. 9	−1. 4	+ . 4	+ . 3
16.4	Bn		I	11 38 27. 63	+ . 48	+ . 01	+ . 2	N	+ 4 27 57. 8	−2. 5	− . 1	− . 2
19.5	M			14 33				N S	−10 2 9. 7	−2. 4	− . 3	− . 3
22.6	M			17 43				N S	−18 49 18. 6	+ . 9	+1. 4	+1. 4
24.7	P		II	19 47 50. 15	+ . 50	− . 01	− . 2	N	−18 13 12. 2	+ . 3	− . 4	− . 4
26.8	P		II	21 42 13. 09	+ . 39	− . 06	− . 8		−13 11			
May 12.3	P		I	10 19 35. 16	+ . 44	− . 01	− . 5	N	+10 51 54. 0	− . 7	+1. 2	+ . 9
16.4	P	E	I	14 1 7. 61	+ . 42	− . 08	−1. 0	N	− 7 34 48. 6	−2. 6	− . 2	− . 7

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1924				h m s	s	s	″		° ′ ″	″	″	″
May 22.7	P	E	II	20 24 50. 88	+0. 56	+0. 06	+0. 8	N	−17 17 18. 9	+0. 9	−0. 2	−0. 3
23.6	Ry		II	21 23 23. 76	+ . 56	+ . 09	+1. 3		−14 33			
June 7.2	Bn	E	I	9 9 26. 74	+ . 33	− . 11	−1. 4		+15 26			
14.4	Ry	W	I	15 32 34. 24	+ . 47	− . 05	− . 5	N	−13 55 10. 9	−2. 8	− . 9	−1. 2
16.5	P		I II	17 43 8. 96	+ . 49	− . 06	− . 9		−19 3			
July 9.3	Bn		I	13 13 30. 20	+ . 40	− . 05	− . 6	N	− 3 12 7. 1	−2. 7	− . 4	− . 8
10.3	Bn		I	14 8 20. 46	+ . 41	− . 06	− . 7	N	− 7 48 47. 7	−2. 3	. 0	− . 5
11.3	M		I	15 5 52. 78	+ . 42	− . 08	−1. 1	N	−12 4 50. 6	−1. 9	+ . 1	− . 3
14.4	M			18 16				N S	−19 26 5. 1	+ . 1	+ . 3	+ . 3
17.6	P		II	21 28 0. 53	+ . 51	+ . 01	+ . 5	N	−14 37 3. 3	+2. 4	+ . 8	+ . 8
18.6	Ry		II	22 25 46. 83	+ . 55	+ . 08	+1. 2	N	−10 54 46. 8	+2. 3	+ . 3	. 0
19.6	Bn		II	23 20 4. 69	+ . 43	− . 01	. 0	N	− 6 42 49. 8	+2. 3	+ . 2	+ . 4
23.7	M		II	2 37 19. 56	+ . 43	+ . 03	+ . 1	N	+ 9 59 56. 1	+ . 5	−1. 3	−1. 2
25.7	Ry		II	4 14 52. 78	+ . 39	− . 02	− . 3		+16 2			
26.8	M	W	II	5 5 15. 23	+ . 43	+ . 01	+ . 1		+18 2			
Aug. 8.3	Ry	E	I	15 44 23. 91	+ . 48	− . 02	− . 2	N	−14 23 43. 5	−2. 0	− . 3	− . 5
12.4	Bn		I	19 56 15. 11	+ . 55	+ . 03	− . 1	S	−18 26 15. 0	−1. 6	−2. 4	−2. 4
14.5	P			21 58				N S	−12 49 54. 6	+1. 1	− . 8	− . 7
15.6	Ry		II	22 54 14. 63	+ . 51	+ . 06	+ . 5	N	− 8 48 58. 8	+1. 4	− . 7	− . 8
18.7	Ry		II	1 28 37. 52	+ . 41	. 00	+ . 3	N	+ 4 24 18. 8	+3. 0	+ . 9	+1. 0
19.7	P		II	2 17 30. 15	+ . 44	+ . 04	+ . 4	N	+ 8 26 15. 7	+1. 4	− . 5	− . 5
20.7	Bn		II	3 6 15. 36	+ . 45	+ . 04	+ . 6	N	+12 0 43. 8	+1. 4	− . 3	− . 3
21.7	P		II	3 55 26. 72	+ . 37	− . 05	− . 6		+15 0			
Sept. 4.2	Ry		I	15 26 44. 72	+ . 46	− . 03	− . 4		−13 22			
6.3	P		I	17 27 15. 22	+ . 54	+ . 03	+ . 4	N	−18 38 49. 3	−1. 5	− . 8	− . 8
8.3	P		I	19 32 8. 84	+ . 57	+ . 06	+ . 5	S	−19 0 20. 9	−1. 1	−1. 6	−1. 7
10.4	Ry		I	21 32 43. 38	+ . 47	− . 02	− . 3	S	−14 22 13. 7	+1. 2	− . 4	− . 2
11.5	P		I	22 29 26. 07	+ . 47	+ . 01	− . 2	S	−10 40 15. 3	+1. 2	− . 8	− . 7
12.5	Ry		I II	23 23 39. 05	+ . 42	− . 02	− . 2		− 6 26			
15.6	Ry		II	1 55 57. 25	+ . 39	− . 02	− . 6	N	+ 6 46 16. 9	+1. 1	− . 9	− . 6
23.7	Bn	E	II	8 45 0. 59	+ . 46	+ . 02	+ . 4	S	+16 49 1. 7	−1. 3	− . 1	− . 2
Oct. 8.3	P	W	I	22 9 28. 85	+ . 40	− . 06	−1. 0	S	−12 9 23. 4	+1. 2	− . 7	− . 2
9.3	P		I	23 3 22. 91	+ . 34	− . 11	−1. 2	S	− 8 8 12. 7	+2. 7	+ . 6	+1. 3
10.4	P		I	23 55 16. 51	+ . 39	− . 04	− . 8	S	− 3 45 33. 1	+1. 7	− . 6	− . 1
13.5	P			2 25				N S	+ 9 10 32. 0	+2. 0	. 0	. 0
14.6	Bn			3 14				N S	+12 45 43. 5	+ . 5	−1. 2	−1. 1
15.6	M		II	4 4 9. 26	+ . 39	− . 03	− . 5	N	+15 43 20. 6	+1. 0	− . 3	− . 1
16.6	Bn			4 55				N S	+17 56 8. 0	− . 2	−1. 1	−1. 1
17.7	P			5 46				N S	+19 18 35. 5	− . 3	− . 8	− . 8
18.7	M		II	6 37 55. 76	+ . 43	. 00	. 0	S	+19 46 53. 0	− . 4	− . 4	− . 5
20.7	P		II	8 22 14. 52	+ . 38	− . 05	− . 5	S	+17 55 0. 4	−1. 6	− . 6	− . 9
21.8	Bn		II	9 14 24. 79	+ . 42	− . 02	+ . 4	S	+15 36 38. 7	−3. 6	−2. 3	−2. 4
23.8	Bn	W	II	10 58 59. 95	+ . 41	− . 03	− . 4		+ 8 35			
Nov. 3.3	Bn	E	I	20 56 4. 71	+ . 54	+ . 05	+ . 7	S	−16 38 10. 3	+1. 4	. 0	− . 1
4.3	M		I	21 53 8. 85	+ . 50	+ . 03	+ . 3	S	−13 27 35. 5	+1. 1	− . 7	− . 7
6.3	Ry		I	23 38 58. 26	+ . 37	− . 06	− . 6	S	− 5 19 58. 2	+2. 4	+ . 2	+ . 7
10.5	M		I II	2 55 40. 90	+ . 42	+ . 01	+ . 1		+11 33			
12.5	Ry			4 36				N S	+17 20 47. 1	. 0	−1. 0	−1. 0
19.7	Bn		II	10 35 52. 93	+ . 43	. 00	+ . 4	S	+10 38 27. 1	−2. 9	−1. 0	−1. 1
20.7	P		II	11 27 7. 40	+ . 37	− . 06	. 0	S	+ 6 30 21. 1	−4. 1	−1. 9	−2. 3
Dec. 1.2	M		I	21 34 19. 06	+ . 51	+ . 02	+ . 1	S	−14 53 41. 8	+1. 1	− . 7	− . 6
2.2	P		I	22 30 38. 59	+ . 52	+ . 06	+ . 8	S	−11 8 44. 4	+1. 7	− . 3	− . 5
9.5	M		I	4 18 29. 25	+ . 40	− . 02	− . 4	S	+16 34 12. 8	+ . 3	− . 9	− . 8
10.5	Bn		I II	5 9 16. 81	+ . 45	+ . 02	+ . 4		+18 39			
11.5	Bn	E	II	6 0 53. 61	+ . 42	− . 02	− . 2	S	+19 51 13. 7	−1. 1	−1. 5	−1. 5

MOON

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—			Limb	App. Decl. of Center	Corr. to—		
					Am. Eph.	Tab. R. A.	Tab. Long.			Am. Eph.	Tab. Decl.	Tab. Lat.
1924				h m s	s	s	"		° ′ "	"	"	"
Dec. 13.6	M	E	II	7 44 57. 08	+0. 39	−0. 04	−0. 4	S	+19 27 34. 3	−1. 3	−0. 7	−0. 9
14.6	P		II	8 36 30. 11	+ . 46	+ . 03	+ . 6	S	+17 52 5. 0	−1. 7	− . 6	− . 6
19.8	Bn	E	II	12 48 50. 76	+ . 39	− . 04	− . 5	S	− 0 33 38. 3	−2. 4	. 0	− . 5
28.2	Bn	W	I	21 6 51. 60	+ . 60	+ . 08	+1. 2		−16 34			
29.2	P		I	22 7 12. 16	+ . 48	− . 01	− . 1		−13 1			
1925												
Jan. 2.8	M		I	1 36 5. 62	+ . 47	+ . 06	+ . 8	S	+ 4 45 37. 0	+2. 0	− . 2	− . 3
4.8	Ry		I	3 13 2. 85	+ . 37	− . 04	− . 9	S	+12 32 53. 2	+ . 3	−1. 4	−1. 1
5.8	P		I	4 2 16. 17	+ . 37	− . 05	−1. 1	S	+15 37 20. 9	− . 7	−2. 1	−1. 9
6.9	M		I	4 52 28. 28	+ . 36	− . 06	−1. 1	S	+17 59 1. 6	− . 6	−1. 6	−1. 4
7.9	Bn		I	5 43 40. 65	+ . 47	+ . 04	+ . 4	S	+19 31 14. 4	−1. 7	−2. 3	−2. 3
8.9	Bn			6 36				N S	+20 8 56. 8	− . 2	− . 2	− . 2
14.1	P		II	10 51 49. 30	+ . 37	− . 05	− . 6		+ 9 49			
15.1	Bn		II	11 41 20. 83	+ . 34	− . 08	− . 2	S	+ 5 41 38. 5	−4. 1	−1. 9	−2. 4
21.2	P		II	17 12 41. 85	+ . 48	− . 05	− . 7		−18 40			
28.7	Ry		I	0 25 17. 37	+ . 43	. 00	− . 7	S	− 1 46 35. 7	+ . 7	−1. 7	−1. 4
30.8	M		I	2 6 10. 34	+ . 40	− . 01	− . 3	S	+ 7 16 14. 5	+1. 4	− . 7	− . 5
31.8	Bn		I	2 55 25. 60	+ . 35	− . 06	−1. 1	S	+11 11 46. 0	+1. 0	− . 8	− . 4
Feb. 3.9	M		I	5 25 39. 56	+ . 40	− . 03	− . 4		+19 2			
4.9	Bn			6 17				S	+19 59 54. 2	−1. 2	−1. 5	−1. 5
5.9	Bn			7 9				N S	+20 1 21. 6	− . 8	− . 6	− . 6
6.9	Bn			8 2				N S	+19 5 11. 7	−1. 8	−1. 1	−1. 1
7.9	Ry			8 54				N S	+17 13 13. 8	−1. 8	− . 6	− . 6
9.0	P			9 45				N S	+14 30 12. 1	−2. 2	− . 6	− . 6
13.1	P		II	13 6 21. 90	+ . 34	− . 09	−1. 2	S	− 1 59 38. 5	−2. 4	− . 1	− . 7
15.2	Bn	W	II	14 51 45. 26	+ . 55	+ . 09	+1. 1	S	−10 56 19. 5	−1. 4	+ . 7	+ . 9

MERCURY

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to. Am. Eph.
1918				h m s	s		° ′ ″	″
Sept. 30.0	P	W	II	11 45 22. 958	+0. 118	C	+ 3 38 30. 34	−0. 56
Oct. 1.0	P		II	11 51 53. 883	+ . 113	C	+ 2 55 33. 47	− . 73
4.0	P		II	12 11 27. 697	+ . 097	C	+ 0 42 4. 05	− . 65
8.0	Sr		C	12 37 18. 250	+ . 240	C	− 2 21 2. 48	− . 58
10.0	Sr		C	12 50 3. 168	+ . 128	C	− 3 52 40. 71	−1. 41
21.0	P		C	13 58 20. 923	+ . 173	C	−11 49 45. 88	+ . 12
Nov. 7.0	M		C	15 42 25. 847	+ . 027	C	−21 19 2. 44	− . 54
8.0	M		C	15 48 37. 124	+ . 034	C	−21 44 10. 03	−1. 33
11.0	P		C	16 7 12. 778	+ . 088	C	−22 52 57. 37	− . 27
14.0	P		C	16 25 48. 053	+ . 243	C	−23 51 27. 59	−1. 49
26.1	M		C	17 36 38. 049	+ . 159	C	−25 48 57. 01	+ . 69
29.1	M		C	17 51 39. 172	+ . 042	C	−25 46 43. 06	− . 56
Dec. 2.1	P		I	18 4 12. 922	+ . 072	C	−25 31 35. 96	+ . 94
26.0	P	W	II	17 8 44. 393	− . 147	C	−19 50 45. 47	+1. 13
1919								
Jan. 5.9	M	E	II	17 26 31. 108	+ . 088	C	−21 17 16. 83	− . 13
6.9	M		II	17 30 34. 370	+ . 070	C	−21 29 20. 47	+ . 33
9.9	M •		II	17 44 9. 558	+ . 228	C	−22 4 5. 00	+ . 60
15.9	P		C	18 15 58. 585	+ . 185	C	−22 57 27. 82	+ . 38
27.0	M		C	19 23 21. 681	+ . 041	C	−23 1 25. 29	+ . 11
30.0	M		C	19 42 52. 837	+ . 077	C	−22 36 44. 93	+ . 47
31.0	M		C	19 49 27. 419	+ . 109	C	−22 25 54. 54	−1. 24
Feb. 7.0	P		C	20 36 12. 943	+ . 083	C	−20 31 37. 56	− . 36
18.0	M		C	21 51 23. 712	+ . 092		−15 12	
Mar. 6.0	Sr		C	23 42 19. 488	+ . 258	C	− 2 38 45. 29	+1. 31
7.0	Sr		C	23 49 4. 463	+ . 193		− 1 44	
10.0	M		I	0 8 46. 093	+ . 133	C	+ 1 0 53. 50	− . 30
18.0	P		I	0 53 8. 447	− . 003	C	+ 7 35 52. 89	+1. 19
21.0	P		I	1 4 43. 734	− . 016	C	+ 9 26 21. 57	+ . 17
25.0	Sr	E	I	1 14 22. 940	− . 020		+11 6	
Apr. 28.9	P	W	C	0 51 41. 393	+ . 113	C	+ 2 53 46. 33	+ . 63
May 1.9	P		C	0 59 46. 707	+ . 127	C	+ 3. 22 51. 27	− . 83
4.9	Sr		II	1 9 38. 830	+ . 060	C	+ 4 9 46. 08	−1. 02
12.9	M		II	1 43 27. 668	+ . 088	C	+ 7 26 0. 23	− . 17
14.9	M		II	1 53 28. 664	+ . 054	C	+ 8 28 7. 96	+ . 46
18.9	P		II	2 15 21. 717	+ . 077	C	+10 44 14. 02	− . 48
21.9	P		II	2 33 27. 320	+ . 090	C	+12 34 29. 02	− . 58
25.9	Sr		II	2 59 59. 527	+ . 087	C	+15 8 11. 68	− . 22
27.0	Sr		II	3 7 4. 955	− . 015	C	+15 47 9. 33	− . 67
29.0	Sr		II	3 21 50. 659	+ . 059	C	+17 4 54. 69	− . 91
June 3.0	M		II	4 2 11. 381	+ . 061	C	+20 11 15. 29	+ . 59
16.0	Sr		I	6 3 29. 635	+ . 155	C	+24 58 35. 89	+ . 39
17.0	Sr		I	6 12 55. 796	+ . 326	C	+25 2 28. 07	− . 53
19.0	Sr		I	6 31 27. 402	+ . 122	C	+25 2 1. 02	+ . 22
20.0	Sr		I	6 40 31. 033	+ . 083	C	+24 57 50. 23	+ . 63
23.0	Sr		I	7 6 43. 161	+ . 081	C	+24 30 44. 83	− . 27
30.1	Sr		I	8 1 11. 350	+ . 100	C	+22 19 25. 36	+1. 26
July 1.1	P		I	8 8 9. 719	+ . 079	C	+21 54 44. 37	− . 93
3.1	P		I	8 21 29. 926	+ . 086	C	+21 2 15. 66	− . 44
Aug. 26.0	P		II	9 14 3. 633	− . 057		+14 2	
28.0	M		II	9 17 8. 798	+ . 008	C	+14 25 41. 92	+ . 02
Sept. 12.0	M		C	10 33 55. 511	+ . 061	C	+10 49 15. 92	− . 78
15.0	P		II	10 54 51. 396	+ . 086	C	+ 8 52 56. 17	−1. 43
16.0	P		II	11 1 51. 719	+ . 129	C	+ 8 11 1. 78	− . 32
18.0	P	W	II	11 15 48. 602	− . 008	C	+ 6 43 41. 04	+ . 54
Oct. 7.0	M	E	C	13 18 7. 731	+ . 031	C	− 7 52 49. 02	− . 72
10.0	M		C	13 36 0. 781	+ . 001	C	−10 0 17. 17	− . 37
13.0	P		C	13 53 42. 186	+ . 156	C	−12 2 5. 27	+ . 03
16.0	P		I	14 11 15. 200	+ . 190	C	−13 57 40. 38	− . 98
Nov. 6.0	P	E	C	16 10 42. 198	+ . 078	C	−23 42 0. 18	−1. 38

MERCURY

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to. Am. Eph.
1919				h m s	s		° ′ ″	″
Nov. 10.1	P	E	I	16 31 2. 234	+0. 124	C	−24 36 3. 91	−1. 11
14.1	P		I	16 48 41. 751	+ . 021	C	−25 6 19. 59	− . 59
17.1	Sr		I	16 59 2. 851	+ . 121	C	−25 11 31. 32	+ . 18
18.1	Sr		C	17 1 43. 801	+ . 151	C	−25 9 38. 26	−1. 86
20.0	P	E	I	17 5 38. 353	− . 057	C	−24 59 52. 56	−1. 76
Dec. 21.9	Bn	W	II	16 26 38. 561	− . 009	C	−19 40 17. 87	− . 97
29.9	Bn		II	17 7 43. 547	+ . 117	C	−21 57 51. 89	−1. 59
1920								
Feb. 19.0	Ry		I	22 51 21. 739	+ . 199	C	− 8 22 8. 59	+ . 91
20.0	Ry		I	22 57 55. 182	+ . 192	C	− 7 31 50. 62	+2. 18
27.1	Ry		C	23 39 31. 151	− . 009	C	− 1 38 32. 79	+ . 61
Mar. 1.1	M		I	23 53 33. 411	+ . 071	C	+ 0 38 11. 98	+1. 18
2.1	M		I	23 57 29. 985	− . 055	C	+ 1 19 22. 71	+ . 31
8.0	Bn	W	I	0 11 33. 713	+ . 003	C	+ 4 17 30. 14	+ . 64
Apr. 14.9	P	E	II	23 56 1. 436	+ . 116	C	− 2 47 15. 75	− . 05
21.9	Ry		II	0 24 22. 714	+ . 084	C	− 0 19 36. 79	− . 79
22.9	Ry		II	0 28 58. 896	+ . 166	C	+ 0 7 35. 15	+ . 05
28.9	M		II	0 59 8. 222	+ . 062	C	+ 3 17 37. 22	+ . 42
29.9	M		II	1 4 34. 720	+ . 130	C	+ 3 53 20. 56	+ . 46
May 2.9	Bn		II	1 21 37. 079	+ . 039	C	+ 5 46 31. 88	+ . 58
3.9	Bn		II	1 27 32. 682	+ . 072	C	+ 6 26 6. 58	+ . 78
5.9	Bn		II	1 39 46. 861	+ . 001	C	+ 7 47 43. 25	+ . 65
10.0	P		II	2 5 53. 905	+ . 165	C	+10 39 6. 15	− . 45
17.0	Ry		II	2 57 32. 887	+ . 097	C	+15 51 49. 36	+ . 96
June 1.0	Bn		I	5 11 35. 377	+ . 077	C	+24 27 19. 79	+ . 49
7.0	P		I	6 5 24. 683	+ . 053	C	+25 24 50. 62	+ . 82
24.1	M		I	8 1 15. 942	− . 008		+21 34	
25.1	M		I	8 6 3. 906	− . 014	C	+21 10 49. 16	− . 04
29.1	Bn		I	8 22 50. 833	− . 027	C	+19 34 20. 07	−2. 03
July 1.1	Bn	E	I	8 29 44. 254	− . 076	C	+18 45 50. 46	+ . 66
Aug. 30.0	M	W	II	10 2 41. 425	+ . 105	C	+13 46 7. 61	−1. 09
Sept. 1.0	Bn		II	10 17 49. 619	+ . 029	C	+12 28 11. 00	+ . 50
3.0	Ry		II	10 32 46. 368	+ . 188	C	+11 4 23. 18	− . 02
15.0	Ry		I	11 55 27. 027	+ . 137	C	+ 1 46 23. 23	−1. 37
17.0	P		I	12 8 3. 601	+ . 141	C	+ 0 11 56. 60	−1. 40
20.0	M		I	12 26 27. 884	+ . 134	C	− 2 7 42. 30	− . 40
22.0	Ry		I	12 38 26. 162	+ . 162	C	− 3 39 2. 74	−1. 44
24.0	P		I	12 50 11. 923	+ . 183	C	− 5 8 37. 56	−1. 36
29.0	Ry		I	13 18 50. 478	+ . 208	C	− 8 43 34. 81	−1. 11
Oct. 5.0	M		C	13 52 4. 489	+ . 019	C	−12 41 13. 85	− . 15
7.0	M		C	14 2 55. 209	− . 051	C	−13 54 46. 80	− . 70
14.0	Bn		I	14 39 53. 326	+ . 086	C	−17 45 56. 88	− . 88
15.0	Bn		I	14 45 0. 626	+ . 106	C	−18 15 15. 60	−1. 00
22.1	P		I	15 18 55. 895	+ . 065	C	−21 9 18. 75	−2. 35
25.1	Ry		I	15 31 49. 518	+ . 088	C	−22 4 26. 53	− . 53
26.1	Ry		I	15 35 46. 952	+ . 062	C	−22 19 47. 84	−2. 14
Nov. 5.0	M		I	15 58 20. 212	− . 138	C	−23 1 38. 70	− . 90
23.0	Ry	W	C	14 58 26. 027	+ . 087	C	−14 35 25. 26	− . 86
1921								
Jan. 25.0	Ry	E	I	20 57 41. 052	+ . 152	C	−19 18 41. 41	+1. 09
27.0	P		I	21 11 43. 573	+ . 113	C	−18 13 25. 94	+ . 86
28.0	Bn		I	21 18 41. 724	+ . 104	C	−17 38 34. 63	+ . 67
Feb. 4.0	Ry		I	22 5 42. 293	+ . 143	C	−12 57 56. 79	+1. 81
15.1	Bn		I	23 1 47. 200	. 000	C	− 5 1 41. 34	+ . 66
18.1	Ry	E	I	23 8 53. 025	+ . 015	C	− 3 26 30. 05	+ . 25

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to. Am. Eph.
1921				h m s	s		° ′ ″	″
Mar. 17.9	Ry	E	II	22 21 35. 435	−0. 015	C	− 9 32 41. 44	+0. 16
Apr. 10.9	Bn	W	II	23 50 54. 958	+ . 148	C	− 3 45 21. 33	+ . 27
18.9	Ry		II	0 36 17. 149	+ . 099	C	+ 1 12 24. 86	− . 64
May 19.0	P		I	4 28 43. 346	− . 034	C	+23 20 27. 63	+ . 13
20.0	Bn		I	4 37 28. 311	+ . 111	C	+23 45 46. 77	− . 03
23.0	Bn		I	5 3 2. 995	+ . 135	C	+24 45 46. 12	− . 18
31.1	Ry		C	6 3 48. 330	− . 150	C	+25 37 26. 50	+ . 50
June 2.1	P		I	6 16 52. 287	− . 013	C	+25 29 39. 45	− . 45
3.1	Bn		I	6 23 2. 930	+ . 060	C	+25 23 17. 17	+ . 27
13.1	Ry		I	7 10 36. 494	+ . 014	C	+23 13 56. 02	− . 68
July 26.9	Ry		II	7 2 9. 113	+ . 033	C	+20 21 27. 90	+ . 50
31.9	Ry		II	7 25 2. 025	+ . 005	C	+20 57 10. 56	− . 14
Aug. 5.0	P		II	7 50 0. 379	+ . 159	C	+20 56 10. 91	−1. 29
10.0	Ry		II	8 27 25. 058	+ . 038	C	+20 1 21. 33	+ . 13
19.0	P		C	9 40 46. 334	+ . 114	C	+15 43 40. 57	− . 83
31.0	Ry		I	11 8 42. 689	+ . 129	C	+ 6 58 4. 61	− . 69
Sept. 2.0	Bn		I	11 21 46. 494	+ . 134	C	+ 5 24 22. 79	−1. 21
7.0	Ry		I	11 52 46. 194	+ . 104	C	+ 1 31 21. 37	−2. 13
9.0	Bn		I	12 4 35. 083	+ . 193	C	− 0 0 20. 46	−1. 86
13.0	Bn		I	12 27 21. 554	+ . 204	C	− 2 59 30. 37	−1. 77
19.0	Ry		I	12 59 41. 236	− . 094	C	− 7 14 4. 84	− . 64
22.0	P		I	13 15 7. 332	+ . 132	C	− 9 13 27. 12	−1. 92
23.0	Bn		I	13 20 9. 576	+ . 146	C	− 9 51 52. 68	−2. 08
Oct. 4.1	Ry		I	14 11 18. 881	+ . 041	C	−15 58 45. 31	− . 41
6.1	P	W	I	14 19 27. 010	− . 010	C	−16 51 49. 84	−1. 54
17.0	Ry	E	I	14 50 7. 137	+ . 057	C	−19 43 34. 97	− . 17
21.0	Bn			14 51		C	−19 29 29. 15	+ . 35
Nov. 14.9	Ry		C	14 8 18. 786	+ . 156	C	−10 27 57. 30	− . 60
21.9	Bn		II	14 39 39. 111	+ . 051	C	−13 26 30. 50	+ . 10
24.9	Ry		II	14 55 55. 576	+ . 046	C	−14 57 47. 21	+1. 59
Dec. 1.0	P		II	15 31 8. 972	+ . 222	C	−17 58 34. 34	− . 84
15.0	P	E	C	17 1 10. 428	+ . 188	C	−23 20 44. 58	− . 38
1922								
Jan. 9.0	Ry	W	I	19 56 47. 806	+ . 196	C	−22 53 54. 38	− . 28
13.0	Bn		I	20 24 55. 821	+ . 161	C	−21 22 6. 45	− . 45
26.1	P		I	21 45 38. 048	+ . 128	C	−14 2 0. 19	+ . 21
30.1	Bn		I	22 1 52. 763	+ . 053	C	−11 37 17. 53	+1. 17
31.1	Bn		I	22 4 45. 726	+ . 076	C	−11 4 50. 06	+ . 04
Feb. 3.1	Ry		I	22 9 53. 497	+ . 007	C	− 9 43 10. 54	− . 94
Mar. 5.9	Ry		II	21 24 12. 199	+ . 019	C	−14 53 22. 66	− . 36
8.9	P		II	21 33 51. 900	+ . 180	C	−14 42 46. 99	+ . 01
12.9	Bn		II	21 49 31. 208	+ . 068	C	−14 5 52. 17	− . 17
15.9	P		II	22 2 51. 953	+ . 053	C	−13 22 5. 20	− . 40
16.9	Ry		II	22 7 33. 809	+ . 069	C	−13 4 33. 74	− . 54
22.9	P	W	II	22 37 50. 445	+ . 205	C	−10 50 10. 85	− . 55
Apr. 20.0	P	E	C	1 35 12. 222	+ . 252	C	+ 8 48 10. 63	+ . 73
May 1.0	Ry		I	3 4 3. 074	+ . 144	C	+18 11 30. 64	+1. 24
2.0	Ry		I	3 12 24. 376	+ . 066	C	+18 55 36. 54	+1. 04
8.0	Bn		I	4 1 15. 680	+ . 110	C	+22 33 14. 23	+1. 13
9.0	Bn		I	4 9 0. 203	+ . 073	C	+23 0 51. 88	+1. 48
11.0	P		I	4 23 59. 364	+ . 124	C	+23 48 27. 38	+ . 78
15.1	Ry		I	4 51 34. 749	+ . 149	C	+24 54 11. 32	− . 18
16.1	Ry		I	4 57 54. 696	− . 004	C	+25 4 51. 88	− . 02
29.1	Ry	E	I	5 55 14. 472	− . 058	C	+24 41 3. 78	− . 52
July 2.9	Bn	W	II	5 29 4. 885	− . 025	C	+19 5 28. 70	− . 80

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to. Am. Eph.
1922				h m s	s		° ′ ″	″
July 5.9	P	W	II	5 34 23. 055	+0. 005	C	+19 36 5. 78	−1. 42
6.9	Ry		II	5 36 51. 557	− . 013	C	+19 48 4. 56	− . 24
16.9	P		II	6 20 55. 408	+ . 068	C	+21 57 34. 84	− . 06
28.0	Ry		II	7 44 43. 761	+ . 081	C	+22 7 25. 70	− . 50
31.0	P	W	II	8 11 4. 835	+ . 125	C	+21 19 17. 99	− . 51
Aug. 18.0	Ry	E	I	10 34 6. 523	+ . 123	C	+10 30 21. 56	− . 04
21.0	P		I	10 53 44. 452	+ . 092	C	+ 8 15 18. 77	− . 53
22.0	P		I	11 0 2. 643	+ . 043	C	+ 7 30 3. 39	− . 41
28.0	P		I	11 35 37. 390	+ . 090	C	+ 2 59 55. 97	− . 53
Sept. 5.1	Bn		I	12 17 55. 458	+ . 118	C	− 2 44 12. 68	− . 78
7.1	Bn		I	12 27 40. 844	+ . 254	C	− 4 5 24. 52	− . 42
14.1	P		I	12 59 9. 210	. 000	C	− 8 27 50. 88	− . 78
15.1	Ry		I	13 3 16. 440	+ . 010	C	− 9 2 0. 07	−1. 17
18.1	Ry		I	13 14 57. 399	+ . 049	C	−10 38 14. 63	− . 93
26.1	P		I	13 39 18. 785	+ . 115	C	−13 55 12. 52	− . 32
28.1	P		I	13 43 11. 550	+ . 010	C	−14 25 55. 08	− . 08
Oct. 29.9	Ry		II	13 9 20. 595	+ . 115	C	− 5 5 50. 95	− . 05
30.9	Ry		II	13 13 10. 294	+ . 064	C	− 5 26 7. 98	− . 08
Nov. 8.9	P		II	13 58 30. 133	+ . 183	C	−10 5 41. 54	− . 34
9.9	Ry		II	14 4 14. 974	+ . 214	C	−10 41 51. 02	+ . 38
16.0	P		II	14 40 5. 030	+ . 170	C	−14 18 36. 27	+ . 23
17.0	Bn		II	14 46 13. 341	+ . 121	C	−14 53 39. 36	− . 06
23.0	Ry		II	15 23 46. 981	+ . 091	C	−18 10 46. 54	+ . 26
24.0	Ry	E	C	15 30 9. 289	+ . 139	C	−18 41 0. 59	−1. 99
1923								
Jan. 12.1	Bn	W	I	20 52 28. 319	+ . 069	C	−18 19 44. 03	− . 13
Feb. 18.9	Ry		C	20 22 58. 366	+ . 286	C	−18 43 40. 75	+ . 25
22.9	Bn		II	20 38 56. 295	+ . 045	C	−18 30 15. 32	− . 32
Mar. 7.9	P		II	21 45 34. 674	+ . 154	C	−15 19 5. 80	− . 40
8.9	Bn		II	21 51 16. 658	+ . 158	C	−14 55 9. 23	+1. 77
20.0	Ry		C	22 57 20. 452	+ . 082	C	− 9 8 47. 59	− . 99
27.0	Bn		II	23 42 26. 915	+ . 185	C	− 4 12 4. 67	+1. 23
29.0	P		II	23 55 50. 522	+ . 102	C	− 2 37 12. 85	+ . 95
Apr. 2.0	Ry		II	0 23 25. 667	+ . 127	C	+ 0 44 35. 06	+1. 16
12.0	P		C	1 37 27. 494	+ . 024	C	+ 9 54 51. 68	− . 42
20.0	Bn		I	2 39 15. 378	+ . 218	C	+16 48 58. 90	− . 70
27.0	Ry		I	3 28 25. 784	+ . 054	C	+21 12 14. 18	+ . 18
May 1.1	Ry		I	3 51 55. 083	− . 007	C	+22 47 56. 57	+ . 87
3.1	P		I	4 2 2. 720	− . 050	C	+23 21 0. 21	+ . 41
4.1	Bn	W	I	4 6 40. 217	+ . 097	C	+23 34 0. 71	+1. 41
June 24.9	Ry	E	II	4 39 0. 755	+ . 085	C	+19 5 46. 93	+ . 33
25.9	Ry		II	4 43 38. 031	+ . 151	C	+19 24 57. 03	− . 27
July 5.0	P		II	5 38 1. 089	+ . 099	C	+22 16 57. 37	+ . 07
6.0	Ry		II	5 45 27. 464	+ . 054	C	+22 32 48. 07	+ . 77
23.0	Ry		C	8 15 52. 896	+ . 086	C	+21 30 1. 59	+ . 49
26.0	Bn		I	8 41 55. 186	+ . 266	C	+20 5 48. 16	+ . 86
Aug. 13.1	Bn		I	10 48 8. 505	+ . 095	C	+ 8 15 30. 83	−1. 97
16.1	P		I	11 4 46. 421	+ . 001	C	+ 6 7 42. 11	−1. 49
21.1	P		I	11 30 12. 679	+ . 099	C	+ 2 39 42. 25	− . 85
Sept. 10.1	Ry		I	12 39 54. 585	+ . 015	C	− 8 3 17. 56	+ . 04
14.1	Ry		I	12 44 16. 411	+ . 031	C	− 8 56 0. 33	− . 53
Oct. 8.0	Ry		II	11 56 28. 012	+ . 052	C	+ 0 56 49. 78	− . 12
9.0	P		II	11 57 30. 208	+ . 098	C	+ 1 6 51. 25	+ . 05
10.9	P		II	12 1 19. 644	+ . 064	C	+ 1 10 44. 82	− . 18
22.0	Ry	E	II	12 50 39. 176	+ . 096	C	− 3 13 56. 38	− . 28

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1923				h m s	s		° ′ ″	″
Nov. 1.0	P	W	II	13 50 49. 966	−0. 004	C	− 9 56 47. 21	−0. 11
9.0	Bn		II	14 40 39. 924	+ . 104	C	−15 5 36. 22	+ . 48
Dec. 7.0	P		I	17 44 33. 270	+ . 160	C	−25 29 50. 50	− . 80
11.0	Bn		I	18 11 47. 965	+ . 135	C	−25 39 40. 88	− . 28
14.0	P		C	18 31 59. 225	+ . 125	C	−25 31 33. 18	− . 58
17.0	P		I	18 51 40. 940	+ . 120	C	−25 9 58. 80	−2. 50
1924								
Jan. 27.9	Ry		II	18 59 18. 394	+ . 114	C	−20 34 59. 70	− . 50
Feb. 21.0	P		II	20 52 51. 159	+ . 129	C	−19 1 44. 01	+ . 19
28.0	P		II	21 36 0. 842	+ . 082	C	−16 22 12. 74	− . 44
Mar. 3.0	Bn		II	22 1 26. 856	+ . 106	C	−14 22 18. 79	− . 09
4.0	Bn		II	22 7 53. 105	+ . 185	C	−13 49 5. 40	− . 50
13.0	P		II	23 7 16. 459	+ . 139	C	− 7 52 17. 98	+ . 22
24.0	Ry		I	0 24 13. 993	+ . 233	C	+ 1 31 25. 84	+ . 54
28.0	Bn	W	I	0 53 20. 950	+ . 140	C	+ 5 18 37. 79	− . 81
Apr. 3.0	P	E	I	1 36 40. 534	+ . 054	C	+10 52 31. 72	+1. 92
8.0	Ry		I	2 10 3. 105	+ . 125	C	+14 54 44. 04	+ . 54
15.1	Bn		I	2 47 20. 739	− . 071	C	+18 54 39. 81	+1. 51
May 25.9	Bn	E	II	2 47 44. 627	+ . 077	C	+12 19 46. 27	+ . 97
June 18.9	Bn	W	II	4 36 38. 810	+ . 180	C	+20 40 59. 11	− . 69
20.0	Bn		II	4 44 7. 067	+ . 147	C	+21 6 53. 73	− . 57
30.0	Ry		II	6 10 41. 628	+ . 138	C	+24 6 34. 14	− . 46
July 11.0	Ry		I	7 53 53. 504	+ . 274	C	+22 41 18. 00	− . 70
15.0	Ry		I	8 27 48. 272	+ . 222	C	+20 59 30. 21	+ . 01
18.0	Bn		I	8 51 19. 829	+ . 269	C	+19 26 32. 84	− . 76
24.1	Bn		I	9 33 30. 653	+ . 223	C	+15 52 57. 90	− . 90
29.1	Bn	W	I	10 4 4. 406	+ . 246	C	+12 39 50. 73	−2. 77
Aug. 14.1	P	E	I	11 16 53. 176	+ . 026	C	+ 2 41 59. 85	−1. 05
15.1	Ry		I	11 20 7. 375	− . 025	C	+ 2 9 50. 31	− . 19
19.1	P		I	11 31 11. 949	− . 001	C	+ 0 12 51. 33	+ . 53
Oct. 2.0	P		II	11 36 25. 340	+ . 130	C	+ 4 28 49. 43	+ . 13
3.0	Ry	E	II	11 42 6. 057	+ . 087	C	+ 3 56 26. 81	+ . 11
9.0	Bn	W	II	12 18 39. 352	+ . 122	C	+ 0 3 16. 64	+ . 74
10.0	P		II	12 24 57. 231	+ . 111	C	− 0 39 43. 17	− . 97
13.0	P		II	12 43 55. 492	+ . 082	C	− 2 51 39. 14	−1. 34
14.0	Bn		II	12 50 14. 999	+ . 099	C	− 3 36 7. 37	− . 27
16.0	Bn		II	13 2 52. 583	+ . 183	C	− 5 5 8. 80	− . 40
17.0	P		II	13 9 10. 157	+ . 067	C	− 5 49 30. 03	−1. 53
20.0	P	W	C	13 27 58. 547	+ . 177	C	− 8 0 50. 77	−1. 07
Nov. 17.0	Ry	E	I	16 23 30. 067	+ . 217	C	−23 24 17. 64	+ . 06
20.0	P		I	16 42 50. 402	+ . 092	C	−24 17 20. 71	−2. 91
24.0	Bn		I	17 8 38. 212	+ . 192	C	−25 10 20. 04	−1. 14
Dec. 2.1	Ry		I	17 58 41. 129	+ . 219	C	−25 50 44. 89	− . 09
9.1	Bn	E	I	18 36 5. 904	+ . 064	C	−25 12 0. 69	− . 89
1925								
Jan. 5.4	Bn	W	II	17 46 45. 345	+ . 005		−20 18	
22.4	P		II	18 36 58. 049	+ . 159	C	−22 31 38. 98	− . 88
Feb. 5.5	P	W	II	19 59 19. 754	+ . 154	C	−21 48 29. 38	− . 58

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
				h m s	s		° ′ ″	″
1919								
June 3.1	M	W	I	7 49 27. 467	+0. 127	N	+23 28 58. 82	−1. 18
13.1	P		I	8 35 8. 729	+ . 019	N	+20 57 2. 26	− . 54
16.1	Sr		I	8 48 11. 450	− . 050	N	+20 2 9. 14	−1. 26
19.1	Sr		I	9 0 54. 673	− . 017	N	+19 3 34. 25	−1. 25
20.1	Sr		I	9 5 4. 642	− . 008	N	+18 43 16. 74	−1. 06
23.1	Sr		I	9 17 20. 946	+ . 016	N	+17 40 16. 01	− . 89
30.1	Sr		I	9 44 37. 104	− . 066	N	+15 2 30. 78	− . 02
July 1.1	P		I	9 48 21. 233	+ . 003	N	+14 38 55. 89	− . 91
3.1	P		I	9 55 41. 829	+ . 039	N	+13 51 9. 85	− . 75
Aug. 8.1	Sr		I	11 31 47. 443	− . 067	N	− 0 43 22. 91	−1. 41
11.1	M		I	11 35 29. 466	+ . 006	N	− 1 43 19. 14	− . 74
18.1	M		I	11 40 10. 571	− . 019	N	− 3 41 50. 92	− . 72
Sept. 15.0	P		II	11 1 13. 506	− . 124		− 3 6	
18.0	P		II	10 55 9. 507	− . 113	N	− 2 13 21. 18	+ . 72
24.9	M	W	II	10 44 44. 017	− . 003		− 0 7	
Oct. 6.9	M	E	II	10 43 15. 899	− . 031	S	+ 2 35 4. 51	+ . 21
9.9	M		II	10 46 9. 043	− . 067	S	+ 2 57 41. 61	+ . 41
12.9	P		II	10 50 11. 040	+ . 030	S	+ 3 12 21. 73	− . 37
19.9	Sr		II	11 3 26. 272	+ . 062	S	+ 3 16 40. 24	− . 76
27.9	M		II	11 23 46. 502	+ . 042	S	+ 2 34 59. 63	+ . 13
Nov. 5.9	P		II	11 51 22. 232	+ . 062	S	+ 0 58 17. 57	− . 53
9.9	P		II	12 4 50. 411	+ . 101	S	+ 0 1 18. 90	− . 70
13.9	P		II	12 18 54. 727	+ . 147	S	− 1 2 49. 56	−1. 66
16.9	Sr		II	12 29 48. 638	− . 012	S	− 1 54 56. 97	− . 57
17.9	Sr		II	12 33 30. 388	+ . 088	S	− 2 13 0. 42	− . 32
19.9	P		II	12 40 58. 833	+ . 063	S	− 2 50 3. 80	− . 70
20.9	Sr		II	12 44 45. 521	+ . 051	S	− 3 9 0. 82	− . 42
23.9	P		II	12 56 15. 193	+ . 153	S	− 4 7 24. 67	− . 97
24.9	P		II	13 0 8. 064	+ . 134	S	− 4 27 20. 61	−1. 81
1921								
Feb. 4.1	Ry		I	0 6 55. 792	+ . 062	S	+ 1 28 27. 37	+ . 77
14.1	Bn		I	0 42 30. 009	− . 081	S	+ 6 26 12. 32	− . 58
15.1	Bn		I	0 45 55. 131	+ . 111	S	+ 6 55 7. 80	+ . 20
18.1	Ry		I	0 55 59. 292	− . 028	S	+ 8 20 35. 05	+ . 15
28.1	Bn		I	1 27 20. 190	− . 020	S	+12 47 48. 81	+ . 61
Mar. 1.1	Bn		I	1 30 15. 030	+ . 050	S	+13 12 43. 65	+ . 35
10.1	P		I	1 54 4. 220	− . 070	S	+16 38 16. 25	− . 25
11.1	Bn		I	1 56 24. 245	+ . 005	S	+16 58 46. 47	+1. 07
15.1	Bn		I	2 4 57. 229	− . 051	S	+18 15 8. 56	− . 94
17.1	P		I	2 8 42. 438	− . 032	S	+18 49 45. 28	− . 02
18.1	Ry		I	2 10 26. 222	− . 168	S	+19 6 3. 11	−1. 29
21.1	Ry		I	2 15 0. 252	− . 058	S	+19 50 48. 20	+ . 30
25.1	Bn	E	I	2 19 27. 666	− . 074		+20 39	
Apr. 11.0	Bn	W	I	2 13 13. 231	− . 099	S	+20 57 4. 84	−1. 46
12.0	Bn		I	2 11 34. 328	− . 092	S	+20 46 19. 36	− . 94
15.0	Ry		I	2 5 59. 118	− . 182	S	+20 5 34. 86	−1. 34
19.0	Ry		I	1 57 29. 397	− . 143	S	+18 53 5. 29	−2. 21
May 8.9	Bn		II	1 26 31. 104	+ . 014	N	+11 26 30. 88	− . 92
9.9	Bn		II	1 26 16. 822	− . 088	N	+11 10 22. 37	− . 33
16.9	Ry		II	1 28 34. 737	− . 033	N	+ 9 48 43. 37	+ . 17
18.9	P		II	1 30 25. 522	− . 008	N	+ 9 35 26. 59	− . 01
19.9	Bn		II	1 31 31. 849	+ . 019	N	+ 9 30 24. 88	+ . 08
30.9	Ry		II	1 50 36. 241	+ . 051	N	+ 9 37 12. 90	− . 30
June 2.9	Bn		II	1 57 39. 061	+ . 001	N	+ 9 55 32. 22	+ . 02
5.9	Bn	W	II	2 5 20. 285	+ . 025	N	+10 19 16. 38	− . 12

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1921				h m s	s		° ′ ″	″
June 12.9	Ry	W	II	2 25 24. 683	−0. 067	N	+11 31 16. 79	−0. 21
19.9	P		II	2 48 1. 862	+ . 082	N	+12 59 21. 09	− . 61
23.9	Ry		II	3 1 56. 619	+ . 059	N	+13 53 50. 95	+ . 45
26.9	Ry		II	3 12 48. 434	+ . 074	N	+14 35 38. 94	− . 06
27.9	Ry		II	3 16 30. 350	+ . 070	N	+14 49 39. 76	+ . 16
July 17.9	Ry		II	4 37 34. 066	+ . 066	N	+19 8 0. 73	+ . 23
19.9	Bn	W	II	4 46 20. 071	+ . 051	N	+19 28 53. 33	− . 57
1922								
Sept. 5.1	Bn	E	I	13 42 55. 217	+ . 067	N	−12 50 13. 40	− . 30
7.1	Bn		I	13 50 30. 069	+ . 079	N	−13 44 16. 34	−1. 64
14.1	P		I	14 16 46. 984	+ . 144	N	−16 44 16. 05	− . 35
15.1	Ry		I	14 20 29. 949	+ . 119	N	−17 8 43. 13	− . 83
25.1	Ry		I	14 56 52. 806	− . 014	N	−20 52 46. 50	+ . 50
26.1	P		I	15 0 24. 841	+ . 091	N	−21 12 58. 60	− . 40
28.1	P		I	15 7 23. 978	+ . 128	N	−21 52 2. 06	− . 66
Oct. 3.1	Ry		I	15 24 18. 208	+ . 078	N	−23 21 36. 28	− . 88
5.1	P		I	15 30 47. 644	+ . 084	N	−23 54 4. 20	−1. 80
12.1	P		I	15 51 53. 194	− . 016	N	−25 31 24. 07	− . 17
13.1	Ry		I	15 54 38. 964	− . 176	N	−25 43 9. 03	+ . 57
Nov. 10.0	Ry		I	16 26 6. 177	− . 273	N	−26 44 48. 66	+1. 54
13.0	Ry		I	16 22 22. 940	− . 140	N	−26 11 59. 53	+ . 67
14.0	Ry		I	16 20 50. 404	− . 156	N	−25 58 56. 97	+1. 53
16.0	P		I	16 17 21. 044	− . 286	N	−25 29 49. 58	+ . 32
Dec. 17.9	Bn	E	II	15 32 15. 194	+ . 104	S	−16 4 27. 61	+ . 49
1923								
Jan. 10.9	P	W	II	16 20 36. 789	+ . 069	S	−17 0 47. 45	− . 55
11.9	Bn		II	16 23 45. 961	+ . 081	S	−17 8 33. 44	−1. 04
28.9	Bn		II	17 26 8. 488	+ . 078		−19 20	
29.9	Bn		II	17 30 14. 192	+ . 122	S	−19 25 51. 08	− . 38
Feb. 18.9	Ry		II	18 58 36. 732	+ . 122	N	−20 14 17. 81	+1. 09
22.9	Bn		II	19 17 16. 346	+ . 156	N	−20 1 54. 78	− . 38
28.9	P		II	19 45 32. 311	+ . 131	N	−19 27 38. 27	− . 37
Mar. 1.9	Ry		II	19 50 16. 188	+ . 118	N	−19 20 3. 36	+ . 64
7.9	P		II	20 18 42. 276	+ . 116	N	−18 23 34. 30	+1. 20
8.9	Bn		II	20 23 26. 659	+ . 149	N	−18 12 20. 95	+ . 05
14.9	P		II	20 51 48. 613	+ . 063	N	−16 54 15. 80	+ . 70
25.9	Bn		II	21 43 12. 126	+ . 146	N	−13 47 9. 79	− . 99
26.9	Bn		II	21 47 49. 292	+ . 142	N	−13 27 34. 67	− . 27
28.9	P		II	21 57 1. 955	+ . 145	N	−12 47 14. 75	+1. 25
Apr. 1.9	Ry	W	II	22 15 20. 553	+ . 123	N	−11 22 14. 42	+ . 48
1924								
Apr. 3.1	P	E	I	3 42 25. 410	− . 060	S	+22 14 58. 54	−1. 26
8.1	Ry		I	4 4 47. 771	+ . 061	S	+23 39 4. 24	− . 56
14.1	Bn		I	4 31 29. 105	+ . 025	S	+25 1 55. 69	+ . 39
15.1	Bn		I	4 35 53. 886	− . 044	S	+25 13 45. 49	+ . 49
24.1	P		I	5 14 49. 856	− . 124	S	+26 34 17. 81	+ . 21
25.1	Bn		I	5 19 2. 433	− . 017	S	+26 40 22. 32	+ . 12
May 1.1	P		I	5 43 35. 148	+ . 018	S	+27 5 5. 21	+1. 01
6.1	Ry		I	6 2 52. 617	− . 093	S	+27 10 53. 11	+1. 01
22.1	P		I	6 53 28. 647	− . 063	N	+26 12 40. 50	+1. 00
26.1	Bn		I	7 2 26. 147	− . 043	N	+25 43 48. 79	+ . 59
June 5.1	P	E	I	7 15 51. 285	− . 145	N	+24 16 2. 43	− . 37
26.0	Ry	W	I	6 52 25. 094	− . 096	N	+20 35 45. 57	+ . 07
July 10.0	P			6 17		N	+18 22 16. 71	− . 79
11.0	Ry	W	II	6 15 19. 232	+ . 032	N	+18 15 24. 50	. 30

VENUS

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1924				h m s	s		° ′ ″	″
July 13.9	Ry	W	II	6 10 24. 729	−0. 051	N	+17 57 47. 91	−0. 69
14.9	Ry		II	6 9 5. 282	+ . 042	N	+17 52 58. 70	− . 50
16.9	P		II	6 6 55. 472	− . 038	N	+17 44 54. 93	− . 37
23.9	Bn		II	6 4 35. 404	+ . 054	N	+17 32 23. 44	+ . 14
27.9	Ry		II	6 6 45. 248	+ . 028	N	+17 34 25. 44	− . 06
28.9	Bn	W	II	6 7 39. 733	+ . 073	N	+17 35 43. 57	− . 33
Aug. 4.9	Bn	E	II	6 17 40. 099	− . 021	N	+17 50 41. 87	+ . 87
27.9	P		II	7 23 9. 525	+ . 125	S	+18 22 3. 64	−1. 36
28.9	Ry		II	7 26 46. 931	+ . 141	S	+18 20 20. 26	− . 04
Sept. 1.9	P		II	7 41 42. 141	+ . 141	S	+18 9 27. 86	+ . 66
3.9	P		II	7 49 23. 544	+ . 134	S	+18 1 32. 34	− . 26
10.9	P		II	8 17 17. 734	+ . 154	S	+17 19 57. 92	+ . 12
17.9	P		II	8 46 22. 734	+ . 074	S	+16 15 38. 62	− . 18
22.9	Ry		II	9 7 39. 051	+ . 191	S	+15 15 30. 27	− . 53
Oct. 1.9	P		II	9 46 32. 361	+ . 141	S	+12 58 23. 23	− . 37
2.9	Ry	E	II	9 50 53. 238	+ . 048	S	+12 40 58. 19	− . 51
8.9	Bn	W	II	10 17 3. 007	+ . 197	S	+10 48 0. 61	− . 09

MARS

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—		Limb	App. Decl. of Center	Corr. to—	
					Am. Eph.	Ross			Am. Eph.	Ross
1913				h m s	s	s		° ′ ″	″	″
Dec. 3.6	P	E	I, II	7 46 21.138	+0.158	−0.032	C	+23 56 11.22	−0.58	+0.09
4.6	P		I, II	7 45 54.648	+ .228	+ .036	C	+24 0 12.89	− .81	− .13
5.6	M		I, II	7 45 24.432	+ .232	+ .038	C	+24 4 23.70	− .50	+ .19
8.6	Ep			7 44			C	+24 17 42.39	−1.31	− .60
9.6	P		I, II	7 42 46.936	+ .156	− .045	C	+24 22 24.66	− .34	+ .37
11.6	Ep		I, II	7 41 6.628	+ .198	− .006	C	+24 32 6.09	− .91	− .19
13.6	M		I, II	7 39 12.272	+ .302	+ .095	C	+24 42 10.81	− .59	+ .14
15.6	Ep		I, II	7 37 3.983	+ .203	− .007	C	+24 52 32.90	−1.00	− .27
27.5	M		I, II	7 20 6.151	+ .361	+ .135	C	+25 55 53.18	− .92	− .19
29.5	P		I, II	7 16 45.284	+ .224	− .002	C	+26 5 39.70	− .70	+ .02
1914										
Jan. 13.5	M		I, II	6 51 3.430	+ .290	+ .067	C	+26 58 37.31	+ .11	+ .70
15.5	Ep		I, II	6 47 55.242	+ .112	− .107	C	+27 2 26.99	− .61	− .04
17.5	P		I, II	6 44 56.016	+ .096	− .122	C	+27 5 33.03	+ .33	+ .89
21.4	P		I, II	6 39 28.660	+ .110	− .098	C	+27 9 34.35	− .75	− .22
26.4	Ep		I, II	6 33 47.701	+ .001	− .197	C	+27 11 4.15	+ .05	+ .54
27.4	P		I, II	6 32 49.644	+ .084	− .112	C	+27 10 56.39	− .71	− .23
28.4	M		I, II	6 31 55.116	+ .236	+ .042	C	+27 10 42.32	− .38	+ .09
29.4	Ep	E	I, II	6 31 3.910	+ .100	− .091	C	+27 10 20.98	− .22	+ .25
Feb. 7.4	M	W	I, II	6 26 6.115	+ .135	− .034	C	+27 2 53.08	+ .58	+ .99
8.4	M		1, II	6 25 50.970	+ .230	+ .064	C	+27 1 39.21	− .59	− .19
9.4	P	W	I, II	6 25 39.074	+ .094	− .070	C	+27 0 23.24	− .26	+ .14
1916										
Jan. 8.6	Sr	E	I, II	10 11 26.666	+ .116	+ .076	C	+15 17 8.98	−1.02	− .47
18.6	M		I, II	10 5 2.630	+ .160	+ .120	C	+16 14 26.72	− .58	.00
20.6	Sr		I, II	10 3 8.903	+ .133	+ .093	C	+16 28 31.54	− .96	− .38
23.6	Sr	E	I, II	9 59 56.788	+ .158	+ .118	C	+16 50 56.87	− .53	+ .05
Feb. 7.5	P	W	I, II	9 38 52.640	+ .020	− .020	C	+18 52 56.84	+ .54	+1.12
9.5	Sr		I, II	9 35 42.022	+ .032	− .008	C	+19 8 28.61	− .69	− .12
14.5	P		I, II	9 27 45.426	− .004	− .042	C	+19 44 28.24	+ .14	+ .69
15.5	Sr		I, II	9 26 11.613	+ .033	− .005	C	+19 51 2.95	−1.05	− .50
29.4	P		I, II	9 7 2.054	+ .004	− .028	C	+20 56 53.30	− .10	+ .36
Mar. 7.4	Sr		I, II	9 0 29.061	− .019	− .048	C	+21 9 39.28	+ .08	+ .50
9.4	S		I, II	8 59 4.675	− .035	− .063	C	+21 10 53.18	− .33	+ .07
10.4	Sr		I, II	8 58 27.343	+ .013	− .014	C	+21 11 7.21	− .49	− .10
11.4	P		I, II	8 57 53.170	.000	− .026	C	+21 11 7.07	+ .07	+ .46
13.4	M			8 57			C	+21 10 21.75	− .65	− .28
16.4	P		I, II	8 55 50.438	− .002	− .024	C	+21 7 30.91	− .09	+ .27
17.4	Sr		I, II	8 55 35.415	+ .025	+ .004	C	+21 6 6.97	− .33	+ .02
23.4	M		I, II	8 55 9.301	+ .021	+ .005	C	+20 53 26.73	− .17	+ .14
1918										
Feb. 9.6	P		I, II	12 16 4.174	+ .044	+ .120	C	+ 2 12 43.04	− .56	− .78
11.6	M		I, II	12 15 26.352	+ .032	+ .111	C	+ 2 19 26.94	− .96	−1.20
12.6	P		I, II	12 15 3.054	+ .044	+ .124	C	+ 2 23 13.97	−1.43	−1.68
13.6	Sr		I, II	12 14 36.793	+ .013	+ .095	C	+ 2 27 19.47	− .13	− .38
23.6	P		I, II	12 7 36.528	+ .008	+ .101	C	+ 3 22 20.95	− .85	−1.19
26.6	Sr			12 5			C	+ 3 43 23.34	+ .14	− .23
Mar. 1.6	Sr		I, II	12 1 16.157	− .063	+ .035	C	+ 4 6 4.66	+ .46	+ .07
2.6	P		I, II	12 0 4.588	− .102	− .003	C	+ 4 13 56.03	− .67	−1.06
3.6	M		I, II	11 58 51.040	− .030	+ .070	C	+ 4 21 58.97	+1.67	+1.27
5.5	Sr		I, II	11 56 17.939	− .061	+ .040	C	+ 4 38 19.42	+ .12	− .29
7.5	M		I, II	11 53 37.888	− .072	+ .030	C	+ 4 55 3.01	+ .31	− .11
15.5	Sr		I, II	11 42 10.689	− .121	− .015	C	+ 6 2 45.28	+ .58	+ .11
23.5	Sr		I, II	11 30 31.763	− .087	+ .018	C	+ 7 4 52.23	+ .73	+ .23
25.5	Sr	W	I, II	11 27 44.949	.121	.016	C	+ 7 18 34.23	+ .13	− .38

MARS

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—		Limb	App. Decl. of Center	Corr. to—	
					Am. Eph.	Ross			Am. Eph.	Ross
1918				h m s	s	s		° ′ ″	″	″
Mar. 26.5	P	W	I, II	11 26 23. 589	−0. 101	+0. 003	C	+ 7 25 5. 33	+0. 63	+0. 12
27.5	P		I, II	11 25 3. 718	− . 122	− . 018	C	+ 7 31 21. 72	+ . 82	+ . 30
28.5	M		I, II	11 23 45. 448	− . 172	− . 068	C	+ 7 37 23. 06	+1. 16	+ . 64
Apr. 18.4	M		I, II	11 5 28. 274	− . 066	+ . 028	C	+ 8 35 36. 30	+ . 50	− . 02
21.4	M		I, II	11 4 32. 487	− . 053	+ . 039	C	+ 8 32 51. 22	+ . 32	− . 20
27.4	Sr		I, II	11 3 57. 953	− . 097	− . 006	C	+ 8 19 44. 81	+ . 71	+ . 18
1920										
Mar. 9.6	M		I, II	14 29 17. 285	− . 105	+ . 062	C	−12 18 50. 33	+ . 37	− . 39
22.6	M		I, II	14 28 5. 328	− . 152	+ . 045	C	−12 17 23. 86	+ . 94	− . 05
23.6	Bn		I, II	14 27 38. 804	− . 236	− . 036	C	−12 15 51. 54	+1. 66	+ . 65
24.6	P		I, II	14 27 9. 500	− . 080	+ . 122	C	−12 14 8. 87	+ . 63	− . 39
26.6	Ry		I, II	14 26 1. 478	− . 142	+ . 065	C	−12 10 5. 64	+ . 26	− . 80
27.6	P	W	I, II	14 25 23. 102	− . 068	+ . 141	C	−12 7 45. 67	+ . 53	− . 55
30.6	Bn	E	I, II	14 23 10. 048	− . 192	+ . 026	C	−11 59 36. 01	+ . 19	− . 94
31.6	Ry			14 22			C	−11 56 28. 75	+ . 95	− . 20
Apr. 2.6	Bn		I, II	14 20 31. 498	− . 182	+ . 043	C	−11 49 42. 20	+ . 80	− . 39
7.5	P		I, II	14 15 14. 268	− . 122	+ . 113	C	−11 29 38. 34	+ . 86	− . 42
10.5	P		I, II	14 11 35. 420	− . 170	+ . 070	C	−11 15 40. 70	+ . 70	− . 63
14.5	Ry		I, II	14 6 16. 479	− . 191	+ . 055	C	−10 55 12. 68	+ . 92	− . 48
29.5	Bn		I, II	13 44 25. 736	− . 334	− . 084	C	− 9 31 34. 97	+1. 63	+ . 05
May 1.5	P		I, II	13 41 37. 842	− . 228	+ . 018	C	− 9 21 11. 98	+1. 32	− . 27
3.5	M		I, II	13 38 55. 444	− . 236	+ . 007	C	− 9 11 19. 82	+ . 88	− . 71
4.4	P		I, II	13 37 36. 694	− . 246	− . 004	C	− 9 6 36. 50	+1. 10	− . 49
5.4	Ry		I, II	13 36 19. 761	− . 249	− . 008	C	− 9 2 2. 75	+1. 55	− . 05
14.4	Ry		I, II	13 26 27. 447	− . 213	+ . 015	C	− 8 29 59. 60	+3. 00	+1. 41
15.4	Bn		I, II	13 25 34. 432	− . 258	− . 032	C	− 8 27 36. 21	+1. 89	+ . 31
17.4	Bn		I, II	13 23 57. 113	− . 267	− . 046	C	− 8 23 33. 68	+1. 62	+ . 06
22.4	P		I, II	13 20 46. 448	− . 242	− . 030	C	− 8 18 8. 93	+1. 17	− . 37
1922										
May 1.6	Bn		I, II	17 38 22. 416	+ . 086		C	−24 2 35. 79	− . 39	
10.6	Ry		I, II	17 38 57. 878	+ . 038		C	−24 30 10. 00	− . 20	
15.6	Bn		I, II	17 37 24. 513	+ . 163		C	−24 46 10. 67	− . 77	
19.6	Ry		I, II	17 35 9. 419	+ . 099		C	−24 59 4. 36	+ . 04	
22.6	Ry		I, II	17 32 53. 506	+ . 076		C	−25 8 38. 04	+ . 06	
24.6	Ry		I, II	17 31 7. 043	+ . 023		C	−25 14 52. 31	+ . 19	
27.5	P		I, II	17 28 5. 146	+ . 026		C	−25 23 55. 12	− . 82	
28.5	M		I, II	17 26 59. 024	+ . 054		C	−25 26 48. 07	+ . 03	
29.5	Bn		I, II	17 25 50. 340	+ . 090		C	−25 29 38. 15	− . 25	
30.5	Ry		I, II	17 24 39. 157	+ . 057		C	−25 32 23. 56	− . 16	
June 7.5	Ry		I, II	17 14 0. 427	+ . 017		C	−25 51 15. 22	+ . 08	
10.5	P		I, II	17 9 40. 110	+ . 010		C	−25 56 34. 83	+ . 47	
12.5	P		I, II	17 6 44. 172	+ . 042		C	−25 59 32. 99	+ . 41	
15.5	Ry	E	I, II	17 2 20. 615	+ . 045		C	−26 3 7. 48	− . 18	
22.5	P	W	I, II	16 52 35. 536	− . 004		C	−26 7 34. 17	− . 67	
23.4	P		I, II	16 51 18. 261	− . 079		C	−26 7 49. 90	−1. 50	
25.4	M		I, II	16 48 50. 646	+ . 036		C	−26 8 5. 42	− . 92	
29.4	Ry		I, II	16 44 26. 470	+ . 040		C	−26 7 55. 08	− . 78	
30.4	Bn		I, II	16 43 27. 820	+ . 110		C	−26 7 46. 08	− . 48	
July 5.4	Ry		I, II	16 39 23. 383	+ . 083		C	−26 6 49. 93	− . 53	
1924										
July 10.6	P		I, II	22 32 3. 731	− . 079		C	−14 44 52. 04	− . 04	
14.6	Bn		I, II	22 34 36. 346	+ . 006		C	−14 46 32. 08	− . 78	
17.6	P		I, II	22 36 1. 468	− . 002		C	−14 50 21. 69	+ . 51	
18.6	Ry		I, II	22 36 24. 086	+ . 046		C	−14 52 9. 49	− . 09	
19.6	Bn	W	I, II	22 36 43. 638	− . 002		C	−14 54 11. 84	− . 14	

MARS

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to—		Limb	App. Decl. of Center	Corr. to—	
					Am. Eph.	Ross			Am. Eph.	Ross
1924				h m s	s	s		° ′ ″	″	″
July 24.6	Bn	W	I, II	22 37 35. 730	−0. 010		C	−15 8 5. 91	−0. 41	
25.6	Ry		I, II	22 37 36. 729	− . 061		C	−15 11 36. 39	− . 99	
26.6	M	W	I, II	22 37 34. 622	− . 058		C	−15 15 19. 76	− . 66	
Aug. 8.6	Ry	E	I, II	22 32 30. 847	− . 043		C	−16 20 11. 39	+1. 31	
12.5	P		I, II	22 29 26. 822	+ . 012		C	−16 43 34. 91	− . 61	
14.5	P		I, II	22 27 42. 406	+ . 006		C	−16 55 15. 44	− . 84	
15.5	Ry		I, II	22 26 47. 567	+ . 037		C	−17 1 0. 94	+ . 06	
18.5	Ry		I, II	22 23 53. 856	− . 024		C	−17 17 52. 64	− . 14	
19.5	P		I, II	22 22 53. 406	− . 064		C	−17 23 17. 53	− . 73	
20.5	Bn		I, II	22 21 52. 056	− . 014		C	−17 28 33. 86	− . 96	
21.5	Ry		I, II	22 20 49. 755	− . 095		C	−17 33 39. 92	− . 12	
Sept. 4.5	Ry		I, II	22 6 38. 392	− . 038		C	−18 20 27. 54	+ . 76	
6.5	P		I, II	22 4 56. 595	− . 015		C	−18 22 20. 99	− . 29	
8.5	P		I, II	22 3 23. 520	− . 040		C	−18 22 52. 56	− . 36	
10.4	Ry	E	I, II	22 2 0. 177	+ . 027		C	−18 22 1. 99	+ . 51	

JUPITER

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1914				h m s	s		° ′ ″	″
July 16.6	P	E	I, II	21 32 10. 270	+0. 010	C	−15 36 13. 59	+0. 21
18.6	P		1, II	21 31 21. 324	+ . 034	C	−15 40 36. 54	+ . 76
19.6	S		I, II	21 30 56. 090	+ . 010	C	−15 42 49. 80	+2. 20
20.6	M		I, II	21 30 30. 387	− . 013	C	−15 45 7. 29	+1. 21
21.6	P		I, II	21 30 4. 304	+ . 024	C	−15 47 25. 94	+ . 86
22.6	P		I, II	21 29 37. 806	+ . 086	C	−15 49 45. 79	+ . 81
Aug. 17.5	Sr		I, II	21 16 42. 715	+ . 025	C	−16 53 53. 86	+ . 14
18.5	M		I, II	21 16 12. 362	+ . 062	C	−16 56 16. 01	+ . 89
19.5	S		I, II	21 15 42. 087	+ . 017	C	−16 58 37. 51	+ . 89
20.5	Sr		I, II	21 15 12. 058	+ . 018	C	−17 0 57. 98	+ . 42
22.5	S		I, II	21 14 12. 637	− . 023	C	−17 5 32. 86	+ . 64
30.4	S		I, II	21 10 27. 186	− . 004	C	−17 22 35. 87	+ . 43
31.4	Sr		I, II	21 10 0. 753	+ . 033	C	−17 24 34. 13	− . 03
Sept. 1.4	M		I, II	21 9 34. 686	− . 004	C	−17 26 29. 06	+ . 54
2.4	S	E	I, II	21 9 9. 140	+ . 020	C	−17 28 22. 44	+ . 16
1915								
Sept. 7.5	M	W	I, II	23 43 7. 450	+ . 060	C	− 3 32 1. 90	+ . 20
8.5	S		I, II	23 42 39. 008	− . 022	C	− 3 35 12. 31	+ . 09
10.5	S		I, II	23 41 41. 786	+ . 046	C	− 3 41 34. 77	+ . 43
14.5	Sr		I, II	23 39 45. 607	+ . 017	C	− 3 54 24. 73	− . 13
15.5	P		I, II	23 39 16. 324	− . 026	C	− 3 57 35. 73	+1. 17
16.5	S		I, II	23 38 47. 060	− . 010	C	− 4 0 48. 51	+ . 39
21.5	Sr		I, II	23 36 20. 917	+ . 037	C	− 4 16 38. 81	+ . 59
22.5	S		I, II	23 35 51. 864	+ . 034	C	− 4 19 45. 90	+ . 70
23.5	M		I, II	23 35 22. 906	+ . 006	C	− 4 22 52. 71	− . 11
24.5	Sr		I, II	23 34 54. 145	+ . 035	C	− 4 25 57. 15	+ . 05
27.5	M		I, II	23 33 28. 753	− . 007	C	− 4 35 1. 19	− . 29
28.5	P		I, II	23 33 0. 724	+ . 004	C	− 4 37 58. 33	+ . 17
Oct. 3.4	Sr		I, II	23 30 44. 521	+ . 031	C	− 4 52 12. 45	+ . 65
9.4	M		I, II	23 28 12. 564	+ . 024	C	− 5 7 47. 93	+ . 27
11.4	S		I, II	23 27 25. 365	− . 005	C	− 5 12 32. 79	+1. 11
1916								
Sept. 23.6	P		I, II	2 8 54. 816	+ . 066	C	+11 25 22. 62	− . 08
26.6	M		I, II	2 7 48. 135	+ . 015	C	+11 19 7. 00	− . 40
27.6	P		I, II	2 7 24. 800	+ . 030	C	+11 16 55. 90	− . 70
29.6	M		I, II	2 6 36. 465	+ . 005	C	+11 12 27. 29	+ . 09
Oct. 1.5	Sr		I, II	2 5 46. 158	+ . 028	C	+11 7 47. 61	− . 19
7.5	P		I, II	2 3 4. 581	+ . 061	C	+10 52 58. 31	+ . 31
12.5	M		I, II	2 0 39. 978	− . 032	C	+10 39 48. 78	− . 12
14.5	Sr		I, II	1 59 40. 327	+ . 027	C	+10 34 24. 14	− . 36
17.5	P		I, II	1 58 9. 300	+ . 050	C	+10 26 10. 93	− . 17
22.5	M		I, II	1 55 35. 010	− . 010	C	+10 12 19. 42	+ . 12
23.5	S		I, II	1 55 4. 020	. 000	C	+10 9 33. 71	+ . 91
24.5	Sr		I, II	1 54 33. 049	+ . 029	C	+10 6 47. 13	+ . 73
26.5	S		I, II	1 53 31. 142	+ . 002	C	+10 1 15. 33	+ . 23
Nov. 11.4	Sr		I, II	1 45 43. 554	+ . 074	C	+ 9 20 7. 18	+ . 68
15.4	M		I, II	1 44 0. 482	+ . 022	C	+ 9 11 16. 76	+1. 36
1918								
Dec. 17.5	Sr		I, II	6 55 23. 335	+ . 025	C	+22 50 8. 28	− . 82
19.5	P		I, II	6 54 18. 478	+ . 018	C	+22 51 50. 60	− . 30
26.5	M	W	I, II	6 50 22. 050	+ . 020	C	+22 57 45. 12	− . 68
1919								
Jan. 6.5	Sr	E	I, II	6 43 57. 855	+ . 055	C	+23 6 31. 50	− . 60
7.5	Sr			6 43		C	+23 7 15. 73	− . 87
10.5	Sr	E	I, II	6 41 40. 213	− . 037	C	+23 9 25. 79	− . 31

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1919				h m s	s		° ′ ″	″
Jan. 13.5	Sr	E	I, II	6 39 59. 575	+0. 025	C	+23 11 29. 00	0. 00
20.4	M		I, II	6 36 16. 591	− . 009	C	+23 15 49. 12	+ . 52
21.4	M		I, II	6 35 46. 476	+ . 026	C	+23 16 22. 82	+ . 22
24.4	P		I, II	6 34 18. 989	− . 061	C	+23 17 59. 86	+ . 56
27.4	P		I, II	6 32 56. 613	− . 017	C	+23 19 28. 61	− . 09
28.4	P		I, II	6 32 30. 291	− . 039	C	+23 19 56. 63	− . 37
30.4	Sr		I, II	6 31 39. 737	+ . 067	C	+23 20 50. 46	− . 34
31.4	Sr		I, II	6 31 15. 353	+ . 013	C	+23 21 16. 20	− . 40
Feb. 3.4	Sr		I, II	6 30 6. 511	+ . 041	C	+23 22 29. 30	+ . 30
6.4	M	E	I, II	6 29 4. 144	+ . 004	C	+23 23 34. 42	− . 18
Dec. 30.6	M	W	I, II	9 19 2. 344	+ . 044	C	+16 28 55. 58	− . 82
1920								
Jan. 10.6	P		I, II	9 14 55. 276	+ . 026	C	+16 49 59. 12	− . 88
12.6	P		I, II	9 14 3. 194	+ . 064	C	+16 54 17. 59	− . 31
13.6	P		I, II	9 13 36. 390	+ . 040	C	+16 56 28. 81	− . 69
17.6	P		I, II	9 11 44. 798	+ . 008	C	+17 5 30. 46	− . 44
19.6	P		I, II	9 10 46. 646	− . 004	C	+17 10 8. 33	− . 97
28.5	M		I, II	9 6 10. 867	+ . 047	C	+17 31 36. 51	− . 49
29.5	M		I, II	9 5 39. 230	+ . 030	C	+17 33 59. 97	−1. 43
Feb. 2.5	M		I, II	9 3 31. 952	+ . 032	C	+17 43 35. 54	− . 96
10.5	P		I, II	8 59 18. 016	+ . 006	C	+18 2 15. 21	+ . 21
13.5	P		I, II	8 57 44. 914	+ . 004	C	+18 8 54. 73	− . 97
17.5	P		I, II	8 55 44. 187	+ . 007	C	+18 17 26. 39	−1. 01
25.4	P		I, II	8 51 59. 733	− . 027	C	+18 32 54. 07	− . 53
27.4	P		I, II	8 51 8. 138	− . 012	C	+18 36 23. 38	− . 02
Mar. 3.4	P	W	I, II	8 49 8. 617	+ . 077	C	+18 44 19. 29	− . 81
1921								
Feb. 5.6	P	E	I, II	11 15 0. 614	+ . 024	C	+ 6 20 11. 64	−1. 06
11.6	Ry		I, II	11 12 43. 037	+ . 027	C	+ 6 35 56. 64	− . 46
12.6	M		I, II	11 12 18. 586	+ . 066	C	+ 6 38 41. 86	−1. 14
14.6	Ry		I, II	11 11 28. 372	+ . 022	C	+ 6 44 20. 96	− . 14
16.6	Ry		I, II	11 10 36. 751	+ . 051	C	+ 6 50 5. 72	− . 98
17.6	P		I, II	11 10 10. 354	− . 026	C	+ 6 53 0. 85	−1. 15
18.6	Bn		I, II	11 9 43. 718	− . 022	C	+ 6 55 57. 72	−1. 08
24.5	Ry		I, II	11 6 58. 381	− . 019	C	+ 7 14 3. 66	− . 44
Mar. 10.5	P		I, II	11 0 14. 856	+ . 076	C	+ 7 56 54. 39	− . 51
16.5	Bn		I, II	10 57 25. 047	− . 013	C	+ 8 14 23. 99	+ . 09
18.5	Ry		I, II	10 56 30. 119	− . 031	C	+ 8 19 58. 76	− . 34
21.5	P		I, II	10 55 9. 903	+ . 023	C	+ 8 28 4. 83	− . 37
22.5	M		I, II	10 54 43. 754	+ . 004	C	+ 8 30 42. 79	+ . 19
23.5	Ry		I, II	10 54 17. 943	− . 017	C	+ 8 33 16. 99	− . 31
25.4	P	E	I, II	10 53 27. 469	+ . 009	C	+ 8 38 18. 41	− . 19
1922								
Feb. 28.6	M	W	I, II	13 8 5. 824	+ . 034	C	− 5 34 23. 64	−1. 24
Mar. 8.6	Bn		I, II	13 5 29. 826	+ . 086	C	− 5 16 49. 05	+ . 25
13.6	M		I, II	13 3 36. 166	− . 014	C	− 5 4 20. 73	− . 93
15.6	Ry			13 2		C	− 4 59 4. 31	− . 91
17.6	Bn		I, II	13 1 57. 962	+ . 062	C	− 4 53 38. 57	+ . 23
23.5	P	W	I, II	12 59 20. 494	+ . 054	C	− 4 36 44. 47	− . 87
Apr. 12.5	Bn	E	I, II	12 49 58. 570	+ . 010	C	− 3 37 51. 74	−1. 04
13.5	Bn		I, II	12 49 30. 926	+ . 066	C	− 3 34 59. 59	+ . 31
15.5	Ry		I, II	12 48 36. 057	+ . 057	C	− 3 29 22. 78	− . 18
18.5	M		I, II	12 47 15. 351	+ . 011	C	− 3 21 9. 96	− . 36
20.5	Ry		I, II	12 46 22. 881	+ . 021	C	− 3 15 50. 18	+ . 52
21.4	P	E	I, II	12 45 57. 130	+ . 070	C	− 3 13 14. 73	− . 23

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1922				h m s	s		° ′ ″	″
Apr. 22.4	Bn	E	I, II	12 45 31. 674	+0. 094	C	− 3 10 40. 97	−0. 37
23.4	Ry		I, II	12 45 6. 437	+ . 007	C	− 3 8 9. 15	+ . 05
26.4	Bn	E	I, II	12 43 53. 254	+ . 064	C	− 3 0 50. 61	− . 01
1923								
Apr. 16.6	Bn	W	I, II	14 56 58. 994	+ . 114	C	−15 26 47. 80	− . 20
17.6	P		I, II	14 56 32. 022	+ . 042	C	−15 24 50. 15	− . 25
18.6	Ry		I, II	14 56 4. 765	+ . 035	C	−15 22 50. 90	− . 20
20.5	Ry		I, II	14 55 9. 265	+ . 025	C	−15 18 49. 35	−1. 15
24.5	Bn		I, II	14 53 14. 948	+ . 038	C	−15 10 29. 00	+ . 30
25.5	Ry		I, II	14 52 45. 717	− . 023	C	−15 8 22. 13	− . 13
May 1.5	P		I, II	14 49 47. 395	+ . 035	C	−14 55 25. 53	− . 53
2.5	Ry		I, II	14 49 17. 303	+ . 043	C	−14 53 14. 05	− . 05
4.5	P	W	I, II	14 48 16. 984	+ . 064	C	−14 48 52. 54	−1. 04
17.5	Ry	E	I, II	14 41 50. 661	+ . 011	C	−14 20 55. 79	+ . 31
19.5	Bn		I, II	14 40 53. 924	+ . 014	C	−14 16 51. 45	− . 15
21.4	M		I, II	14 39 58. 378	+ . 018	C	−14 12 52. 17	− . 17
22.4	P		I, II	14 39 31. 061	− . 009	C	−14 10 55. 20	− . 60
24.4	Bn		I, II	14 38 37. 560	+ . 020	C	−14 7 4. 57	+ . 63
26.4	Ry		I, II	14 37 45. 533	− . 007	C	−14 3 22. 99	+ . 01
1924								
May 5.6	Bn		I, II	17 10 20. 917	+ . 047	C	−22 14 24. 30	+ . 20
13.6	P		I, II	17 7 2. 202	+ . 082	C	−22 10 40. 60	−1. 10
16.6	Bn		I, II	17 5 39. 264	+ . 044	C	−22 9 3. 26	− . 36
22.5	P		I, II	17 2 42. 485	+ . 045	C	−22 5 31. 29	+ . 11
31.5	Ry		I, II	16 57 57. 685	+ . 075	C	−21 59 34. 54	− . 64
June 4.5	Bn			16 56		C	−21 56 42. 49	+ . 61
5.5	Ry	E	I, II	16 55 14. 327	+ . 027	C	−21 55 59. 30	+ . 30
14.5	Ry	W	I, II	16 50 22. 561	− . 009	C	−21 49 22. 93	−1. 13
16.5	P		I, II	16 49 19. 393	− . 057	C	−21 47 53. 24	+ . 26
19.5	Ry		I, II	16 47 46. 646	− . 004	C	−21 45 42. 78	− . 18
20.5	M		I, II	16 47 16. 276	− . 024	C	−21 44 59. 56	− . 06
23.4	Ry		I, II	16 45 47. 315	+ . 055	C	−21 42 53. 53	−1. 23
25.4	Bn		I, II	16 44 49. 837	+ . 057	C	−21 41 29. 56	+ . 24
26.4	Bn			16 44		C	−21 40 49. 20	+ . 20
July 9.4	Bn		I, II	16 39 2. 358	+ . 038	C	−21 33 14. 65	− . 05
11.4	M		I, II	16 38 21. 986	− . 044	C	−21 32 19. 06	+ . 44
1925								
May 27.1	Ry		I, II	19 35 29. 749	− . 031	C	−21 44 52. 85	− . 15
31.1	M		I, II	19 34 31. 564	+ . 014	C	−21 47 40 92	+ . 08
June 2.1	M		I, II	19 33 58. 102	+ . 002	C	−21 49 15. 05	− . 55
4.1	P		I, II	19 33 21. 897	+ . 037	C	−21 50 53. 42	+ . 48
6.1	P		I, II	19 32 42. 910	− . 010	C	−21 52 39. 25	− . 45
11.1	P		I, II	19 30 54. 323	+ . 053	C	−21 57 22. 73	+ . 47
12.1	Ry		I, II	19 30 30. 677	− . 013	C	−21 58 23. 57	− . 07
13.1	Ry		I, II	19 30 6. 483	− . 047	C	−21 59 24. 47	+ . 33
16.1	Ry		I, II	19 28 50. 621	− . 029	C	−22 2 35. 19	− . 59
17.1	P		I, II	19 28 24. 266	− . 014	C	−22 3 39. 00	+ . 70
20.1	P		I, II	19 27 2. 146	− . 034	C	−22 6 59. 35	− . 35
22.1	P	W	I, II	19 26 5. 150	. 000	C	−22 9 15. 09	+ . 11

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1913				h m s	s		° ′ ″	″
Nov. 13.6	P	E	I, II	5 2 1. 494	−0. 126	C	+21 1 36. 86	−0. 54
17.6	Ep		I, II	5 0 48. 041	− . 059	C	+20 59 53. 34	− . 16
20.5	P		I, II	4 59 50. 474	− . 106	C	+20 58 33. 63	+ . 53
21.5	P		I, II	4 59 30. 938	− . 082	C	+20 58 6. 85	+1. 05
24.5	Ep		I, II	4 58 31. 178	− . 112	C	+20 56 43. 54	+ . 54
Dec. 3.5	P		I, II	4 55 25. 381	− . 089	C	+20 52 30. 24	+ . 54
9.5	M		I, II	4 53 19. 342	− . 088	C	+20 49 41. 02	+ . 12
12.5	M		I, II	4 52 16. 696	− . 034	C	+20 48 17. 00	−1. 10
13.5	Ep		I, II	4 51 55. 892	− . 068	C	+20 47 50. 58	− . 22
18.5	P		I, II	4 50 13. 392	− . 168	C	+20 45 37. 41	− . 39
22.4	Ep		I, II	4 48 53. 872	− . 168	C	+20 43 56. 42	− . 28
27.4	P		I, II	4 47 18. 843	− . 057	C	+20 41 59. 31	+ . 21
29.4	Ep		I, II	4 46 42. 415	− . 035	C	+20 41 15. 79	+ . 39
30.4	M		I, II	4 46 24. 586	− . 034	C	+20 40 54. 16	− . 24
1914								
Jan. 6.4	M	E	I, I	4 44 27. 921	− . 019	C	+20 38 42. 95	− . 75
Nov. 25.6	S	W	I, II	6 3 29. 094	− . 026	C	+22 16 43. 56	−1. 24
Dec. 14.5	P		I, II	5 57 14. 972	− . 028	C	+22 17 52. 39	− . 01
16.5	S		I, II	5 56 32. 440	− . 090	C	+22 17 58. 95	− . 55
17.5	P		I, II	5 56 11. 128	− . 072	C	+22 18 2. 83	− . 17
21.5	P		I, II	5 54 45. 567	− . 073	C	+22 18 16. 52	− . 28
22.5	P		I, II	5 54 24. 172	− . 068	C	+22 18 20. 63	+ . 43
30.5	P		I, II	5 51 34. 738	− . 152	C	+22 18 47. 34	+ . 24
1915								
Jan. 1.5	M		I, II	5 50 53. 462	− . 048	C	+22 18 53. 35	− . 35
2.5	Sr		I, II	5 50 32. 915	− . 105	C	+22 18 56. 77	− . 33
4.5	Sr		I, II	5 49 52. 415	− . 105	C	+22 19 3. 13	− . 67
5.5	M		I, II	5 49 32. 474	− . 046	C	+22 19 6. 80	− . 40
7.4	S		I, II	5 48 53. 018	− . 082	C	+22 19 13. 62	− . 38
8.4	M		I, II	5 48 33. 654	− . 046	C	+22 19 16. 87	− . 63
9.4	S		I, II	5 48 14. 424	− . 096	C	+22 19 20. 86	− . 14
26.4	M	W	I, II	5 43 32. 066	− . 064	C	+22 20 33. 97	− . 83
Dec. 8.6	M	E	I, II	7 5 10. 196	− . 034	C	+22 4 46. 73	− . 37
9.6	P		I, II	7 4 52. 992	− . 038	C	+22 5 17. 95	− . 45
10.6	S		I, II	7 4 35. 521	− . 009	C	+22 5 50. 19	− . 01
21.5	Sr		I, II	7 1 6. 795	− . 085	C	+22 12 0. 35	+ . 25
22.5	P		I, II	7 0 46. 670	− . 040	C	+22 12 34. 82	− . 28
23.5	Sr		I, II	7 0 26. 295	− . 095	C	+22 13 9. 24	− . 96
24.5	P		I, II	7 0 5. 892	− . 028	C	+22 13 45. 06	− . 34
31.5	S			6 58		C	+22 17 53. 67	+ . 07
1916								
Jan. 2.5	S		I, II	6 56 57. 069	− . 101		+22 19	
3.5	P		I, II	6 56 35. 864	− . 056	C	+22 19 39. 70	− . 10
8.5	P		I, II	6 54 49. 640	− . 130	C	+22 22 34. 47	− . 13
14.5	Sr		I, II	6 52 44. 251	− . 089	C	+22 25 56. 66	−1. 54
23.4	M		I, II	6 49 45. 440	− . 120	C	+22 30 44. 77	+ . 57
24.4	S		I, II	6 49 26. 564	− . 116	C	+22 31 14. 39	+ . 09
25.4	P	E	I, II	6 49 7. 887	− . 143	C	+22 31 44. 26	+ . 36
Feb. 3.4	S	W	I, II	6 46 32. 463	− . 107	C	+22 35 53. 15	− . 25
7.4	S	W	I, II	6 45 31. 676	− . 104	C	+22 37 32. 79	− . 21
Dec. 17.6	M	E	I, II	8 6 30. 536	− . 084	C	+20 25 14. 61	+ . 21
22.6	S		I, II	8 5 10. 554	− . 146	C	+20 29 48. 29	− . 01
25.6	Sr	E	I, II	8 4 19. 220	. 000	C	+20 32 41. 69	− . 31
1917								
Jan. 6.5	P	W	I, II	8 0 32. 959	− . 051	C	+20 45 3. 51	+ . 81

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1917				h m s	s		° ′ ″	″
Jan. 7.5	M	W	I, II	8 0 12. 951	−0. 099	C	+20 46 6. 51	−0. 09
18.5	P		I, II	7 56 28. 120	− . 160	C	+20 57 52. 50	+ . 80
20.5	P		I, II	7 55 46. 976	− . 084	C	+20 59 58. 17	− . 23
25.5	S		I, II	7 54 4. 717	− . 133	C	+21 5 10. 00	+ . 50
26.5	Sr		I, II	7 53 44. 595	− . 055	C	+21 6 10. 71	+ . 21
28.5	M		I, II	7 53 4. 472	− . 128	C	+21 8 10. 65	− . 25
30.5	Sr		I, II	7 52 24. 994	− . 076	C	+21 10 9. 25	+ . 15
Feb. 6.4	P		I, II	7 50 12. 096	− . 044	C	+21 16 42. 77	+ . 27
7.4	Sr		I, II	7 49 53. 875	− . 105	C	+21 17 35. 26	− . 44
14.4	P		I, II	7 47 53. 870	− . 130	C	+21 23 26. 02	+ . 12
17.4	P		I, II	7 47 6. 868	− . 052	C	+21 25 42. 80	+ . 10
1918								
Jan. 25.5	Sr		I, II	8 57 3. 156	− . 184	C	+18 8 59. 46	− . 34
Feb. 9.5	M		I, II	8 52 9. 264	− . 136	C	+18 30 27. 47	− . 13
11.5	P		I, II	8 51 30. 946	− . 084	C	+18 33 11. 18	− . 22
12.5	Sr		I, II	8 51 11. 829	− . 191	C	+18 34 31. 90	− . 30
13.5	M		I, II	8. 50 52. 977	− . 163	C	+18 35 52. 92	+ . 82
15.5	Sr		I, II	8. 50 15. 675	− . 175	C	+18 38 29. 76	+ . 16
18.5	M		I, II	8 49 21. 044	− . 106	C	+18 42 18. 89	+ . 19
20.5	M		I, II	8 48 45. 569	− . 101	C	+18 44 46. 61	+ . 11
21.4	Sr		I, II	8 48 28. 167	− . 083	C	+18 45 58. 99	+ . 19
23.4	M		I, II	8 47 53. 964	− . 106	C	+18 48 19. 47	− . 53
28.4	Sr		I, II	8 46 32. 919	− . 111	C	+18 53 51. 91	+ . 01
Mar. 1.4	P		I, II	8 46 17. 428	− . 212	C	+18 54 55. 13	+ . 73
2.4	M		I, II	8 46 2. 412	− . 128	C	+18 55 56. 03	+ . 53
5.4	P		I, II	8 45 19. 017	− . 053	C	+18 58 50. 68	− . 32
7.4	Sr	W	I, II	8 44 51. 562	− . 128	C	+19 0 40. 76	− . 24
1919								
Jan. 9.6	P	E	I, II	10 0 13. 310	− . 050	C	+13 41 34. 50	+ . 80
10.6	P		I, II	10 0 0. 846	− . 114	C	+13 42 52. 12	− . 08
13.6	M		I, II	9 59 21. 783	− . 077	C	+13 46 57. 89	+ . 89
20.6	P		I, II	9 57 40. 160	− . 120	C	+13 57 16. 88	+ . 78
21.6	M		I, II	9 57 24. 682	− . 008	C	+13 58 50. 26	+ . 96
24.6	M		I, II	9 56 36. 400	− . 110	C	+14 3 35. 22	+ . 12
27.6	Sr		I, II	9 55 46. 277	− . 093	C	+14 8 29. 36	+ . 36
28.6	P		I, II	9 55 29. 160	− . 100	C	+14 10 9. 31	+ . 71
30.6	P		I, II	9 54 54. 406	− . 094	C	+14 13 30. 33	+ . 73
Feb. 24.5	Sr		I, II	9 47 13. 159	− . 131	C	+14 55 58. 37	+ . 57
27.5	M		I, II	9 46 18. 856	− . 134	C	+15 0 45. 47	+ . 67
Mar. 3.5	M		I, II	9 45 8. 377	− . 113	C	+15 6 54. 14	+ . 64
4.5	M		I, II	9 44 51. 157	− . 123	C	+15 8 23. 38	+ . 68
11.4	P		I, II	9 42 56. 419	− . 071	C	+15 18 11. 21	+ . 51
18.4	Sr		I, II	9 41 13. 603	− . 107	C	+15 26 46. 05	+ . 65
21.4	Sr	E	I, II	9 40 33. 887	− . 073	C	+15 30 1. 22	+ . 32
1920								
Jan. 28.6	M	W	I, II	10 50 52. 950	− . 130	C	+ 9 24 23. 93	+1. 03
29.6	M		I, II	10 50 39. 506	− . 084	C	+ 9 25 57. 15	− . 35
Feb. 2.6	M		I, II	10 49 42. 933	− . 047	C	+ 9 32 29. 05	− . 15
11.6	P		I, II	10 47 22. 056	− . 104	C	+ 9 48 16. 71	+ . 41
19.5	M		I, II	10 45 5. 244	− . 096	C	+10 3 7. 55	+ . 65
25.5	P		I, II	10 43 18. 529	− . 121	C	+10 14 25. 19	+ . 19
Mar. 1.5	P		I, II	10 41 48. 803	− . 077	C	+10 23 45. 86	+ . 56
3.5	P		I, II	10 41 13. 009	− . 051	C	+10 27 26. 72	+ . 22
8.5	M		I, II	10 39 44. 274	− . 136	C	+10 36 28. 55	+ . 75
9.5	P	W	I, II	10 39 26. 817	− . 083	C	+10 38 14. 08	+ . 38

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1920				h m s	s		° ′ ″	″
Mar. 22.4	Bn	W	I, II	10 35 51. 429	−0. 231	C	+10 59 26. 58	+0. 98
23.4	P		I, II	10 35 36. 272	− . 108	C	+11 0 54. 78	+1. 18
24.4	M		I, II	10 35 21. 241	− . 079	C	+11 2 20. 39	+ . 29
25.4	Bn		I, II	10 35 6. 340	− . 160	C	+11 3 44. 91	+ . 11
27.4	Bn	W	I, II	10 34 37. 428	− . 182	C	+11 6 29. 60	+ . 70
1921								
Feb. 12.6	M	E	I, II	11 39 35. 482	− . 088	C	+ 4 43 42. 35	− . 25
14.6	Ry		I, II	11 39 7. 576	− . 154	C	+ 4 47 7. 61	+1. 01
16.6	Ry		I, II	11 38 38. 817	− . 123	C	+ 4 50 35. 58	+ . 08
17.6	P		I, II	11 38 24. 038	− . 172	C	+ 4 52 22. 05	+ . 45
18.6	Bn		I, II	11 38 9. 109	− . 161	C	+ 4 54 9. 62	+ . 82
24.6	Ry		I, II	11 36 35. 530	− . 110	C	+ 5 5 11. 86	+ . 56
Mar. 10.5	P		I, II	11 32 38. 750	− . 090	C	+ 5 32 7. 44	+ . 54
16.5	Bn		I, II	11 30 54. 209	− . 191	C	+ 5 43 36. 62	+ . 42
18.5	Ry		I, II	11 30 19. 686	− . 104	C	+ 5 47 21. 76	+ . 16
21.5	P		I, II	11 29 28. 202	− . 118	C	+ 5 52 55. 37	+ . 97
23.5	Ry		I, II	11 28 54. 293	− . 117	C	+ 5 56 32. 13	+ . 23
25.5	P	E	I, II	11 28 20. 791	− . 089	C	+ 6 0 5. 81	+ . 51
Apr. 5.4	M	W	I, II	11 25 26. 632	− . 118	C	+ 6 18 9. 21	+ . 11
6.4	Ry		I, II	11 25 11. 875	− . 135	C	+ 6 19 38. 98	+ . 28
9.4	Bn		I, II	11 24 28. 964	− . 166	C	+ 6 23 57. 56	+ . 66
1922								
Feb. 28.6	M		I, II	12 26 21. 755	− . 145	C	− 0 1 52. 46	− . 16
Mar. 8.6	Bn		I, II	12 24 21. 748	− . 142	C	+ 0 12 21. 88	+ . 58
13.5	M		I, II	12 23 1. 376	− . 134	C	+ 0 21 39. 19	+ . 19
15.5	Bn		I, II	12 22 28. 311	− . 189	C	+ 0 25 25. 59	+ . 19
17.5	M		I, II	12 21 54. 944	− . 136	C	+ 0 29 13. 94	+1. 14
23.5	P	W	I, II	12 20 13. 154	− . 056	C	+ 0 40 37. 64	+ . 34
Apr. 11.5	P	E	I, II	12 14 54. 490	− . 140	C	+ 1 14 54. 70	+1. 40
12.5	Bn		I, II	12 14 38. 696	− . 124	C	+ 1 16 33. 37	+1. 57
13.5	Bn		I, II	12 14 23. 025	− . 145	C	+ 1 18 9. 72	+ . 82
15.4	Ry		I, II	12 13 52. 317	− . 053	C	+ 1 21 19. 63	+ . 63
18.4	M		I, II	12 13 7. 402	− . 108	C	+ 1 25 54. 50	+1. 60
20.4	Ry		I, II	12 12 38 495	− . 085	C	+ 1 28 48. 50	+1. 00
21.4	P		I, II	12 12 24. 290	− . 150	C	+ 1 30 13. 16	+ . 86
22.4	Bn	E	I, II	12 12 10. 394	− . 136	C	+ 1 31 36. 14	+ . 74
23.4	Ry	W	I, II	12 11 56. 733	− . 107	C	+ 1 32 57. 63	+ . 93
1923								
Mar. 14.6	Ry		I, II	13 12 24. 463	− . 077	C	− 4 43 41. 34	+ . 56
17.6	P		I, II	13 11 40. 138	− . 052	C	− 4 38 43. 49	− . 09
20.6	P		I, II	13 10 54. 006	− . 124	C	− 4 33 37. 30	. 00
28.5	Ry		I, II	13 8 44. 753	− . 077	C	− 4 19 34. 23	+ . 17
29.5	P			13 8		C	− 4 17 47. 81	− . 41
Apr. 9.5	Ry		I, II	13 5 21. 141	− . 109	C	− 3 58 9. 40	+ . 50
10.5	P		I, II	13 5 4. 056	− . 104	C	− 3 56 24. 25	+ . 05
16.5	P		I, II	13 3 22. 308	− . 122	C	− 3 46 2. 60	− . 20
18.5	Ry		I, II	13 2 48. 931	− . 139	C	− 3 42 40. 36	+ . 74
19.5	Ry		I, II	13 2 32. 388	− . 132	C	− 3 41 1. 96	− . 06
20.5	P		I, II	13 2 15. 926	− . 154	C	− 3 39 24. 19	− . 59
24.5	P		I, II	13 1 11. 464	− . 096	C	− 3 33 0. 94	+ . 26
27.4	P		I, II	13 0 24. 623	− . 087	C	− 3 28 27. 67	− . 57
30.4	P		I, II	12 59 39. 235	− . 155	C	− 3 24 5. 20	+ . 30
May 1.4	P		I, II	12 59 24. 543	− . 117	C	− 3 22 40. 94	+ . 26
2.4	Ry	W	I, II	12 59 9. 980	− . 150	C	− 3 21 18. 51	− . 11

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1924				h m s	s		° ′ ″	″
Mar. 19.6	Bn	W	I, II	13 59 49. 525	−0. 085	C	− 9 19 24. 20	+0. 30
29.6	Bn	W	I, II	13 57 26. 528	− . 112	C	− 9 4 58. 69	− . 59
Apr. 12.5	P	E	I, II	13 53 37. 248	− . 102	C	− 8 42 49. 96	+ . 44
14.5	Ry		I, II	13 53 2. 964	− . 086	C	− 8 39 36. 25	+ . 55
16.5	Ry		I, II	13 52 28. 507	− . 073	C	− 8 36 22. 75	+ . 55
19.5	M		I, II	13 51 36. 572	− . 158	C	− 8 31 33. 95	+ . 55
21.5	Bn		I, II	13 51 2. 052	− . 088	C	− 8 28 22. 98	+ . 42
29.5	M		I, II	13 48 45. 171	− . 109	C	− 8 15 58. 20	+ . 50
May 1.5	Bn		I, II	13 48 11. 623	− . 167	C	− 8 12 58. 67	+ . 73
5.5	M		I, II	13 47 6. 040	− . 120	C	− 8 7 10. 86	+ . 94
6.5	P		I, II	13 46 49. 946	− . 134	C	− 8 5 46. 48	+ . 92
13.4	M		I, II	13 45 2. 072	− . 158	C	− 7 56 30. 69	+ . 51
16.4	P		I, II	13 44 18. 790	− . 130	C	− 7 52 52. 03	+1. 07
22.4	Ry		I, II	13 42 58. 380	− . 080	C	− 7 46 17. 74	+ . 76
30.4	Bn	E	I, II	13 41 25. 709	− . 131	C	− 7 39 7. 25	+1. 15

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1914				h m s	s		° ′ ″	″
July 7.6	P	E	C	20 53 2. 939	+0. 199	C	−18 13 43. 51	+0. 79
8.6	M		C	20 52 54. 481	+ . 171	C	−18 14 18. 91	+ . 59
9.6	P		C	20 52 45. 992	+ . 202	C	−18 14 54. 80	+ . 30
19.5	S		C	20 51 16. 238	+ . 158	C	−18 21 4. 67	+ . 93
20.5	M		C	20 51 6. 910	+ . 170	C	−18 21 43. 11	+ . 69
21.5	P		C	20 50 57. 515	+ . 165	C	−18 22 21. 24	+ . 96
22.5	P		C	20 50 48. 175	+ . 265	C	−18 22 59. 69	+1. 01
Aug. 17.5	Sr		C	20 46 38. 864	+ . 094	C	−18 39 28. 85	+ . 55
18.5	M		C	20 46 29. 729	+ . 189	C	−18 40 4. 62	+ . 48
19.5	S		C	20 46 20. 496	+ . 126	C	−18 40 39. 70	+ . 80
20.5	Sr		C	20 46 11. 373	+ . 113	C	−18 41 15. 29	+ . 31
22.4	S		C	20 45 53. 432	+ . 172	C	−18 42 24. 06	+ . 64
30.4	S		C	20 44 44. 787	+ . 107	C	−18 46 44. 00	+1. 10
31.4	Sr		C	20 44 36. 700	+ . 150	C	−18 47 15. 37	+ . 33
Sept. 1.4	M		C	20 44 28. 649	+ . 119	C	−18 47 45. 68	+ . 12
2.4	S	E	C	20 44 20. 806	+ . 176	C	−18 48 15. 58	− . 18
1915								
July 2.6	P	W	C	21 10 37. 358	+ . 208	C	−17 1 4. 58	+ . 82
13.6	M		C	21 9 10. 921	+ . 151	C	−17 7 40. 63	+ . 37
14.6	Sr		C	21 9 2. 484	+ . 184	C	−17 8 19. 31	− . 01
17.6	S		C	21 8 36. 485	+ . 105	C	−17 10 16. 34	− . 14
20.6	Sr		C	21 8 9. 858	+ . 098	C	−17 12 15. 69	− . 19
24.5	M		C	21 7 33. 519	+ . 149	C	−17 14 57. 50	+ . 10
Sept. 7.5	M		C	21 0 44. 210	+ . 130	C	−17 44 3. 55	+ . 35
8.5	S		C	21 0 36. 543	+ . 093	C	−17 44 34. 58	+ . 42
9.5	M		C	21 0 29. 077	+ . 137	C	−17 45 5. 56	+ . 04
10.5	S		C	21 0 21. 666	+ . 116	C	−17 45 36. 32	− . 82
13.5	P		C	21 0 0. 302	+ . 142	C	−17 47 2. 19	− . 29
14.5	Sr		C	20 59 53. 428	+ . 128	C	−17 47 29. 59	− . 19
15.5	P		C	20 59 46. 675	+ . 095	C	−17 47 56. 05	+ . 25
16.5	S		C	20 59 40. 113	+ . 113	C	−17 48 22. 82	− . 22
20.5	M	W	C	20 59 15. 338	+ . 168	C	−17 50 0. 48	+ . 52
1916								
July 11.6	Sr	E	C	21 25 59. 237	+ . 157	C	−15 52 36. 79	+ . 51
12.6	M		C	21 25 51. 408	+ . 148	C	−15 53 15. 13	+ . 57
23.6	M		C	21 24 19. 180	+ . 180	C	−16 0 42. 99	+ . 41
29.5	Sr		C	21 23 25. 136	+ . 246	C	−16 5 1. 34	+ . 76
Aug. 2.5	S		C	21 22 47. 992	+ . 152	C	−16 7 56. 52	+1. 18
4.5	S	E	C	21 22 29. 264	+ . 144		−16 9	
Sept. 2.4	S	W	C	21 18 2. 801	+ . 071	C	−16 29 50. 18	+ . 52
3.4	M		C	21 17 54. 443	+ . 113	C	−16 30 27. 58	+ . 72
7.4	S		C	21 17 21. 829	+ . 169	C	−16 32 53. 48	+ . 32
9.4	M		C	21 17 6. 063	+ . 113	C	−16 34 3. 31	− . 11
11.4	S		C	21 16 50. 800	+ . 130	C	−16 35 9. 74	+ . 86
13.4	M		C	21 16 35. 948	+ . 098	C	−16 36 15. 50	+ . 20
16.4	M		C	21 16 14. 753	+ . 183	C	−16 37 48. 16	+ . 44
19.4	P		C	21 15 54. 616	+ . 146	C	−16 39 15. 28	+ . 42
20.4	M		C	21 15 48. 154	+ . 104	C	−16 39 42. 74	+ . 66
21.4	S		C	21 15 41. 881	+ . 111	C	−16 40 9. 94	+ . 36
1919								
July 29.6	M		C	22 12 2. 180	+ . 140	C	−11 58 35. 05	+ . 45
Aug. 8.6	M		C	22 10 38. 357	+ . 107	C	−12 6 30. 20	+ . 70
9.6	Sr		C	22 10 29. 639	+ . 119	C	−12 7 19. 70	+ . 30
11.5	Sr		C	22 10 12. 034	+ . 164	C	−12 8 58. 75	+ . 35
15.5	P	W	C	22 9 36. 155	+ . 065	C	−12 12 19. 15	+ . 25

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
				h m s	s		° ′ ″	″
1919								
Aug. 19.5	P	W	C	22 8 59. 933	+0. 123	C	−12 15 41. 17	+0. 13
22.5	M		C	22 8 32. 531	+ . 131	C	−12 18 12. 36	+ . 74
25.5	M		C	22 8 4. 984	+ . 054	C	−12 20 43. 90	+ . 60
26.5	P		C	22 7 55. 944	+ . 154	C	−12 21 34. 71	+ . 09
28.5	M		C	22 7 37. 631	+ . 091	C	−12 23 14. 93	− . 03
Sept. 8.5	Sr		C	22 5 59. 369	+ . 109	C	−12 32 8. 93	− . 03
12.4	Sr		C	22 5 25. 222	+ . 182	C	−12 35 12. 62	+ . 38
16.4	Sr		C	22 4 52. 175	+ . 205	C	−12 38 8. 91	+ . 79
18.4	M			22 4		C	−12 39 34. 02	+ . 78
25.4	P		C	22 3 43. 063	+ . 093	C	−12 44 14. 03	+ . 07
26.4	P	W	C	22 3 35. 916	+ . 076	C	−12 44 50. 43	+ . 97
1920								
July 29.6	M	E	C	22 27 35. 980	+ . 160	C	−10 30 45. 07	+ . 83
30.6	Bn		C	22 27 28. 309	+ . 129	C	−10 31 30. 34	+1. 16
Aug. 2.6	P		C	22 27 4. 847	+ . 157	C	−10 33 51. 14	+ . 26
3.6	P	E	C	22 26 56. 828	+ . 148	C	−10 34 38. 20	+ . 80
11.5	Ry	W	C	22 25 50. 012	+ . 122	C	−10 41 12. 53	+ . 67
26.5	Ry		C	22 23 36. 336	+ . 106	C	−10 54 8. 76	+ . 64
30.5	Ry		C	22 23 0. 126	+ . 126	C	−10 57 36. 73	+ . 57
Sept. 2.5	Bn		C	22 22 33. 032	+ . 082	C	−11 0 10. 93	+ . 87
3.5	Bn		C	22 22 24. 123	+ . 153	C	−11 1 1. 76	+1. 14
4.5	Ry		C	22 22 15. 161	+ . 141	C	−11 1 53. 50	+ . 30
10.5	Bn		C	22 21 22. 221	+ . 141	C	−11 6 52. 26	+1. 14
13.5	P		C	22 20 56. 425	+ . 145	C	−11 9 17. 53	+ . 87
16.4	Ry		C	22 20 31. 154	+ . 084	C	−11 11 39. 10	+ . 50
17.4	Ry		C	22 20 22. 837	+ . 027	C	−11 12 25. 08	+ . 62
18.4	P		C	22 20 14. 739	+ . 109	C	−11 13 11. 14	+ . 16
24.4	Ry		C	22 19 27. 511	+ . 091	C	−11 17 32. 49	+ . 51
1921								
Aug. 4.6	Ry		C	22 42 20. 529	+ . 109	C	− 9 4 16. 87	+ . 63
9.6	P		C	22 41 41. 005	+ . 175	C	− 9 8 19. 62	+ . 98
10.6	P		C	22 41 32. 831	+ . 161	C	− 9 9 9. 96	+ . 54
18.5	Ry		C	22 40 25. 099	+ . 069	C	− 9 16 0. 31	+1. 39
19.5	Ry		C	22 40 16. 447	+ . 127	C	− 9 16 52. 81	+1. 49
21.5	Ry		C	22 39 58. 871	+ . 091	C	− 9 18 38. 70	+1. 30
22.5	Ry		C	22 39 50. 045	+ . 085	C	− 9 19 31. 97	+1. 13
27.5	Ry		C	22 39 5. 526	+ . 126	C	− 9 23 59. 20	+1. 00
Sept. 7.5	Bn		C	22 37 26. 820	+ . 140	C	− 9 33 45. 41	+ . 79
13.5	P		C	22 36 34. 063	+ . 173	C	− 9 38 55. 71	+ . 79
14.5	Bn		C	22 36 25. 379	+ . 139	C	− 9 39 45. 94	+1. 16
19.4	P		C	22 35 42. 946	+ . 096	C	− 9 43 53. 30	+ . 70
22.4	Ry		C	22 35 18. 295	+ . 075	C	− 9 46 15. 15	+1. 55
30.4	M		C	22 34 16. 283	+ . 013	C	− 9 52 10. 47	+1. 93
Oct. 1.4	P		C	22 34 9. 095	+ . 125	C	− 9 52 53. 00	+1. 00
1922								
Aug. 9.6	M		C	22 57 4. 218	+ . 078	C	− 7 34 55. 95	+1. 15
15.6	P	W	C	22 56 16. 544	+ . 114	C	− 7 39 57. 57	− . 17
18.5	Ry	E	C	22 55 51. 731	+ . 161	C	− 7 42 31. 47	+1. 63
21.5	Ry		C	22 55 26. 293	+ . 163	C	− 7 45 10. 30	+1. 50
22.5	Ry		C	22 55 17. 702	+ . 162	C	− 7 46 4. 54	+ . 66
23.5	Bn		C	22 55 9. 078	+ . 178	C	− 7 46 58. 34	+ . 46
28.5	Ry		C	22 54 25. 285	+ . 165	C	− 7 51 28. 50	+1. 60
Sept. 5.5	M		C	22 53 14. 007	+ . 087	C	− 7 58 45. 65	+1. 85
13.5	Ry		C	22 52 2. 999	+ . 099	C	− 8 5 58. 22	+1. 68
14.5	Ry	E	C	22 51 54. 228	+ . 108	C	− 8 6 51. 65	+1. 45

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1922				h m s	s		° ′ ″	″
Sept. 15.5	P	E		22 52		C	− 8 7 44. 40	+1. 60
22.4	M		C	22 50 45. 576	+0. 086	C	− 8 13 44. 94	+1. 16
26.4	M		C	22 50 12. 756	+ . 126	C	− 8 17 1. 24	+1. 16
27.4	Ry		C	22 50 4. 732	+ . 122	C	− 8 17 48. 98	+1. 22
28.4	Ry		C	22 49 56. 765	+ . 085	C	− 8 18 35. 25	+2. 05
30.4	P		C	22 49 41. 229	+ . 169	C	− 8 20 8. 58	+1. 42
Oct. 2.4	P		C	22 49 25. 940	+ . 130	C	− 8 21 38. 37	+1. 73
1923								
Aug. 13.6	M		C	23 11 49. 052	+ . 172	C	− 6 2 58. 75	+1. 55
15.6	Bn		C	23 11 33. 545	+ . 105	C	− 6 4 38. 61	+1. 29
22.5	M		C	23 10 37. 036	+ . 156	C	− 6 10 41. 84	+ . 66
23.5	P		C	23 10 28. 664	+ . 134	C	− 6 11 34. 87	+ . 93
25.5	Bn		C	23 10 11. 854	+ . 194	C	− 6 13 21. 64	+1. 66
27.5	Ry		C	23 9 54. 703	+ . 133	C	− 6 15 10. 68	+1. 22
30.5	M		C	23 9 28. 756	+ . 136	C	− 6 17 55. 52	+ . 78
31.5	Ry		C	23 9 20. 027	+ . 137	C	− 6 18 50. 08	+1. 52
Sept. 1.5	Bn		C	23 9 11. 213	+ . 083	C	− 6 19 45. 77	+1. 23
10.5	Ry		C	23 7 51. 574	+ . 134	C	− 6 28 6. 04	+1. 56
11.5	Bn		C	23 7 42. 697	+ . 137	C	− 6 29 1. 86	+1. 14
28.4	P		C	23 5 16. 199	+ . 119	C	− 6 44 7. 96	+1. 04
Oct. 1.4	P		C	23 4 51. 936	+ . 086	C	− 6 46 36. 19	+ . 81
8.4	P		C	23 3 58. 392	+ . 112	C	− 6 52 0. 33	+1. 47
11.4	Ry		C	23 3 36. 931	+ . 121	C	− 6 54 9. 63	+1. 37
1924								
Aug. 14.6	P		C	23 26 43. 870	+ . 160	C	− 4 27 54. 08	+1. 32
15.6	Ry		C	23 26 36. 430	+ . 140	C	− 4 28 43. 25	+ . 95
18.6	Ry		C	23 26 13. 584	+ . 104	C	− 4 31 12. 78	+1. 02
19.6	P		C	23 26 5. 816	+ . 126	C	− 4 32 3. 85	+ . 95
20.6	Bn		C	23 25 57. 957	+ . 137	C	− 4 32 55. 34	+ . 86
21.6	P		C	23 25 49. 960	+ . 090	C	− 4 33 46. 67	+1. 33
26.5	P		C	23 25 9. 201	+ . 181	C	− 4 38 12. 24	+1. 26
27.5	M		C	23 25 0. 796	+ . 146	C	− 4 39 5. 87	+1. 83
28.5	P		C	23 24 52. 410	+ . 180	C	− 4 40 0. 49	+1. 71
29.5	Ry		C	23 24 43. 919	+ . 169	C	− 4 40 55. 17	+1. 83
30.5	M		C	23 24 35. 345	+ . 125	C	− 4 41 50. 43	+1. 57
Sept. 4.5	P		C	23 23 52. 072	+ . 102	C	− 4 46 28. 71	+1. 59
9.5	P		C	23 23 8. 227	+ . 207	C	− 4 51 9. 69	+2. 11
10.5	Ry		C	23 22 59. 336	+ . 146	C	− 4 52 6. 01	+2. 19
11.5	P	E	C	23 22 50. 519	+ . 169	C	− 4 53 3. 01	+1. 49

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1913				h m s	s		° ′ ″	″
Dec. 27.6	M	E	C	7 57 31. 949	−0. 121	C	+20 15 4. 67	−0. 13
29.6	P		C	7 57 18. 963	− . 077	C	+20 15 41. 65	− . 35
1914								
Jan. 13.5	M		C	7 55 36. 008	− . 072	C	+20 20 35. 30	+ . 10
15.5	M		C	7 55 21. 816	− . 134	C	+20 21 14. 84	− . 56
17.5	P		C	7 55 7. 632	− . 178	C	+20 21 55. 85	+ . 25
27.5	P		C	7 53 57. 394	− . 116	C	+20 25 15. 65	+ . 15
28.5	M		C	7 53 50. 448	− . 152	C	+20 25 35. 09	− . 11
29.5	Ep	E	C	7 53 43. 530	− . 190	C	+20 25 53. 98	− . 82
Feb. 7.4	M	W	C	7 52 43. 548	− . 142	C	+20 28 45. 70	. 00
8.4	M		C	7 52 37. 150	− . 130	C	+20 29 3. 64	− . 36
9.4	P		C	7 52 30. 852	− . 088	C	+20 29 21. 65	− . 45
16.4	P		C	7 51 48. 310	− . 120	C	+20 31 24. 19	+ . 39
1915								
Jan. 4.5	S		C	8 6 14. 098	− . 082	C	+19 54 3. 19	− . 21
7.5	Sr		C	8 5 53. 773	− . 137	C	+19 55 5. 36	− . 34
8.5	Sr		C	8 5 46. 916	− . 154	C	+19 55 26. 30	− . 40
9.5	M		C	8 5 40. 027	− . 173	C	+19 55 48. 11	+ . 31
13.5	S		C	8 5 12. 392	− . 058	C	+19 57 12. 57	− . 33
21.5	Sr			8 4		C	+20 0 4. 43	− . 67
25.5	P		C	8 3 48. 094	− . 136	C	+20 1 30. 74	− . 16
28.5	S		C	8 3 27. 195	− . 165	C	+20 2 34. 33	− . 37
29.5	M	W	C	8 3 20. 385	− . 065	C	+20 2 55. 90	+ . 10
Feb. 9.4	S	E	C	8 2 6. 697	− . 153	C	+20 6 40. 67	− . 33
10.4	P		C	8 2 0. 378	− . 072	C	+20 7 0. 50	− . 10
17.4	Sr		C	8 1 17. 233	− . 207	C	+20 9 12. 55	− . 05
18.4	P		C	8 1 11. 517	− . 073	C	+20 9 29. 75	− . 85
20.4	Sr		C	8 0 59. 966	− . 164	C	+20 10 5. 71	− . 19
1916								
Jan. 2.6	S		C	8 15 59. 096	− . 124	C	+19 27 52. 36	− . 14
3.6	P		C	8 15 52. 704	− . 046	C	+19 28 13. 64	− . 26
7.5	S		C	8 15 26. 257	− . 133	C	+19 29 40. 50	− . 40
8.5	Sr		C	8 15 19. 597	− . 083	C	+19 30 3. 05	+ . 05
18.5	M		C	8 14 10. 884	− . 116	C	+19 33 48. 89	+ . 19
23.5	Sr	E	C	8 13 35. 993	− . 087	C	+19 35 42. 83	− . 37
Feb. 3.5	S	W	C	8 12 19. 898	− . 162	C	+19 39 51. 65	− . 35
7.5	S		C	8 11 53. 111	− . 139	C	+19 41 19. 62	+ . 02
14.4	P		C	8 11 8. 089	− . 121	C	+19 43 47. 19	+ . 29
15.4	Sr		C	8 11 1. 933	− . 077	C	+19 44 7. 04	− . 16
29.4	P		C	8 9 43. 053	− . 127	C	+19 48 25. 54	− . 56
Mar. 4.4	Sr	W	C	8 9 23. 769	− . 101	C	+19 49 29. 72	− . 28
Dec. 17.6	M	E	C	8 26 53. 138	− . 092	C	+18 55 29. 02	+ . 32
22.6	S		C	8 26 26. 559	− . 141	C	+18 57 2. 39	− . 21
25.6	Sr	E	C	8 26 9. 668	− . 082	C	+18 58 2. 56	− . 14
1917								
Jan. 6.6	P	W	C	8 24 55. 487	− . 103	C	+19 2 25. 03	+ . 93
7.6	M		C	8 24 48. 909	− . 131	C	+19 2 47. 22	+ . 12
9.5	P		C	8 24 35. 700	− . 110	C	+19 3 33. 61	+ . 01
18.5	P		C	8 23 34. 432	− . 168	C	+19 7 7. 94	− . 06
25.5	S		C	8 22 45. 941	− . 129	C	+19 9 58. 08	+ . 58
26.5	Sr		C	8 22 39. 034	− . 096	C	+19 10 22. 50	+ . 80
28.5	M		C	8 22 25. 149	− . 121	C	+19 11 10. 47	+ . 47
30.5	Sr		C	8 22 11. 393	− . 097	C	+19 11 57. 97	− . 03
Feb. 7.5	Sr		C	8 21 17. 219	− . 141	C	+19 15 6. 02	− . 18
14.4	P	W	C	8 20 31. 929	− . 171	C	+19 17 43. 74	+ . 14

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1917				h m s	s		° ′ ″	″
Feb. 17.4	P	W	C	8 20 13. 356	−0. 154	C	+19 18 48. 31	+0. 21
22.4	S		C	8 19 43. 811	− . 109	C	+19 20 31. 13	+ . 03
1918								
Jan. 25.5	Sr		C	8 32 13. 832	− . 168	C	+18 41 12. 46	− . 14
Feb. 9.5	M		C	8 30 31. 847	− . 123	C	+18 47 28. 25	− . 65
11.4	P		C	8 30 18. 764	− . 076	C	+18 48 16. 99	− . 21
12.4	Sr		C	8 30 12. 249	− . 081	C	+18 48 40. 76	− . 34
13.4	M		C	8 30 5. 695	− . 185	C	+18 49 5. 44	+ . 54
15.4	Sr		C	8 29 52. 960	− . 160	C	+18 49 52. 47	+ . 77
18.4	M		C	8 29 34. 291	− . 139	C	+18 51 0. 56	+ . 16
20.4	M		C	8 29 22. 053	− . 217	C	+18 51 45. 68	+ . 58
21.4	Sr		C	8 29 16. 176	− . 114	C	+18 52 6. 80	− . 30
23.4	M		C	8 29 4. 450	− . 100	C	+18 52 50. 01	− . 29
28.4	Sr		C	8 28 36. 434	− . 106	C	+18 54 33. 01	− . 19
Mar. 1.4	P		C	8 28 31. 020	− . 170	C	+18 54 52. 67	− . 23
2.4	M		C	8 28 25. 768	− . 162	C	+18 55 12. 38	+ . 08
5.4	P		C	8 28 10. 552	− . 118	C	+18 56 8. 37	− . 23
7.4	Sr	W	C	8 28 0. 854	− . 116	C	+18 56 43. 78	− . 72
1919								
Jan. 6.6	Sr	E	C	8 43 43. 584	− . 156	C	+18 2 29. 57	− . 23
9.6	P		C	8 43 24. 793	− . 147	C	+18 3 44. 39	+ . 29
10.6	P		C	8 43 18. 391	− . 179	C	+18 4 9. 60	+ . 40
20.5	P		C	8 42 12. 488	− . 132	C	+18 8 28. 67	+ . 27
21.5	M		C	8 42 5. 763	− . 097	C	+18 8 55. 07	+ . 17
24.5	M		C	8 41 45. 298	− . 152	C	+18 10 14. 83	+ . 03
27.5	Sr		C	8 41 24. 834	− . 096	C	+18 11 35. 06	+ . 16
28.5	P		C	8 41 17. 962	− . 118	C	+18 12 2. 30	+ . 70
30.5	Sr		C	8 41 4. 278	− . 102	C	+18 12 54. 65	− . 45
31.5	Sr		C	8 40 57. 377	− . 173	C	+18 13 21. 66	− . 14
Feb. 24.4	Sr		C	8 38 21. 995	− . 135	C	+18 23 25. 05	+ . 15
27.4	M		C	8 38 4. 727	− . 133	C	+18 24 31. 94	+ . 24
Mar. 3.4	M		C	8 37 42. 736	− . 184	C	+18 25 57. 16	+ . 56
4.4	M		C	8 37 37. 496	− . 144	C	+18 26 17. 35	+ . 25
11.4	P		C	8 37 3. 192	− . 128	C	+18 28 30. 11	+ . 01
13.4	S	E	C	8 36 54. 311	− . 099	C	+18 29 4. 60	− . 20
Dec. 30.6	M	W	C	8 53 41. 960	− . 170	C	+17 27 15. 43	+1. 03
1920								
Jan. 10.6	P		C	8 52 37. 415	− . 175	C	+17 31 43. 57	− . 23
12.6	P		C	8 52 24. 890	− . 160	C	+17 32 35. 96	+ . 06
17.5	P		C	8 51 52. 668	− . 152	C	+17 34 48. 96	− . 54
19.5	P		C	8 51 39. 487	− . 183	C	+17 35 43. 06	− . 94
28.5	M		C	8 50 38. 954	− . 186	C	+17 39 53. 67	+ . 37
29.5	M		C	8 50 32. 168	− . 172	C	+17 40 20. 93	− . 37
30.5	Bn		C	8 50 25. 380	− . 160	C	+17 40 49. 54	+ . 34
Feb. 2.5	M		C	8 50 5. 023	− . 137	C	+17 42 12. 48	− . 12
10.5	P		C	8 49 11. 085	− . 215	C	+17 45 52. 83	− . 07
13.5	P		C	8 48 51. 319	− . 181	C	+17 47 13. 51	− . 19
17.5	P		C	8 48 25. 413	− . 187	C	+17 48 58. 62	− . 48
25.4	P		C	8 47 36. 092	− . 158	C	+17 52 19. 38	− . 32
27.4	P		C	8 47 24. 255	− . 285	C	+17 53 7. 07	− . 13
Mar. 1.4	Bn	W	C	8 47 7. 396	− . 124	C	+17 54 16. 37	+ . 07
1921								
Jan. 12.6	Ry	E	C	9 1 33. 820	− . 190	C	+16 59 4. 62	− . 28
23.5	Ry		C	9 0 22. 856	− . 171	C	+17 4 13. 16	+ . 16
24.5	Bn	E	C	9 0 16. 223	− . 157	C	+17 4 41. 79	− . 01

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1921				h m s	s		° ′ ″	″
Jan. 27.5	M	E	C	8 59 56. 181	−0. 129	C	+17 6 8. 15	−0. 25
Feb. 4.5	Bn		C	8 59 2. 210	− . 140	C	+17 10 0. 17	− . 33
5.5	P		C	8 58 55. 463	− . 147	C	+17 10 29. 21	− . 29
6.5	Ry			8 59		C	+17 10 58. 95	+ . 65
11.5	P		C	8 58 15. 300	− . 210	C	+17 13 21. 61	+ . 41
12.5	Bn		C	8 58 8. 736	− . 164		+17 14	
15.5	P		C	8 57 49. 079	− . 211	C	+17 15 13. 58	+ . 58
16.5	Bn		C	8 57 42. 603	− . 217	C	+17 15 41. 11	+ . 51
24.4	Ry		C	8 56 52. 623	− . 177	C	+17 19 13. 56	+ . 06
25.4	P			8 56		C	+17 19 38. 97	− . 03
Mar. 1.4	P		C	8 56 23. 178	− . 212	C	+17 21 19. 21	+ . 81
3.4	Bn		C	8 56 11. 991	− . 119	C	+17 22 6. 95	+ . 75
7.4	P	E	C	8 55 50. 301	− . 189	C	+17 23 38. 67	+ . 87
1922								
Jan. 14.6	M	W	C	9 10 32. 571	− . 159	C	+16 24 33. 95	− . 35
23.5	Bn		C	9 9 35. 377	− . 183	C	+16 28 54. 30	+ . 30
24.5	P		C	9 9 28. 844	− . 176	C	+16 29 23. 57	− . 03
25.5	Bn		C	9 9 22. 272	− . 168	C	+16 29 53. 33	+ . 03
26.5	M		C	9 9 15. 698	− . 132	C	+16 30 23. 21	+ . 11
30.5	Ry		C	9 8 49. 136	− . 094	C	+16 32 23. 56	+ . 56
31.5	P		C	9 8 42. 324	− . 216	C	+16 32 53. 68	+ . 58
Feb. 24.5	P		C	9 6 5. 352	− . 158	C	+16 44 34. 72	+ . 32
28.4	P		C	9 5 41. 209	− . 191	C	+16 46 22. 14	+ . 94
Mar. 5.4	Ry		C	9 5 12. 484	− . 226	C	+16 48 28. 09	+ . 09
8.4	Ry		C	9 4 56. 191	− . 189	C	+16 49 40. 79	+ . 69
12.4	Ry		C	9 4 35. 584	− . 186	C	+16 51 11. 35	+ . 25
13.4	M			9 4		C	+16 51 33. 48	+ . 58
15.4	Bn		C	9 4 20. 975	− . 265	C	+16 52 15. 86	+ . 76
16.4	Bn		C	9 4 16. 420	− . 160	C	+16 52 36. 06	+ . 46
17.4	M		C	9 4 11. 819	− . 201	C	+16 52 56. 85	+1. 05
1923								
Jan. 9.6	P		C	9 20 8. 294	− . 186	C	+15 45 27. 40	+ . 80
30.5	Ry		C	9 17 57. 910	− . 160	C	+15 55 44. 84	+ . 24
Feb. 7.5	Ry		C	9 17 4. 760	− . 180	C	+15 59 54. 26	+ . 76
8.5	Ry		C	9 16 58. 078	− . 202	C	+16 0 24. 86	+ . 36
11.5	Ry		C	9 16 38. 139	− . 201	C	+16 1 57. 64	+ . 24
16.5	P		C	9 16 5. 251	− . 179	C	+16 4 31. 12	+ . 72
19.5	P		C	9 15 45. 796	− . 184	C	+16 6 0. 52	+ . 02
20.5	P		C	9 15 39. 403	− . 167	C	+16 6 30. 52	+ . 32
21.5	Ry		C	9 15 32. 960	− . 240	C	+16 7 0. 31	+ . 61
23.5	Ry		C	9 15 20. 316	− . 244	C	+16 7 58. 59	+ . 49
Mar. 1.4	Bn		C	9 14 43. 689	− . 171	C	+16 10 47. 07	− . 33
2.4	Bn		C	9 14 37. 794	− . 146	C	+16 11 14. 50	− . 10
4.4	Ry		C	9 14 26. 067	− . 223	C	+16 12 8. 85	+ . 55
5.4	P		C	9 14 20. 357	− . 193	C	+16 12 35. 07	+ . 47
Mar. 7.4	Ry		C	9 14 9. 147	− . 143	C	+16 13 26. 93	+ . 63
1924								
Jan. 14.6	Bn		C	9 28 41. 381	− . 219	C	+15 9 38. 25	+1. 05
18.6	Ry		C	9 28 17. 799	− . 211	C	+15 11 34. 42	+ . 42
23.6	Ry		C	9 27 47. 178	− . 132	C	+15 14 5. 72	+ . 32
Feb. 8.5	Bn		C	9 26 3. 148	− . 202	C	+15 22 33. 72	+ . 72
13.5	Bn		C	9 25 30. 125	− . 185	C	+15 25 13. 76	+ . 66
16.5	P		C	9 25 10. 397	− . 233	C	+15 26 48. 61	+ . 61
27.5	Ry		C	9 24 0. 349	− . 181	C	+15 32 25. 28	+ . 38
Mar. 3.4	Ry	W	C	9 23 30. 210	− . 180	C	+15 34 49. 87	+ . 97

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Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1924				h m s	s		° ′ ″	″
Mar. 7.4	P	W	C	9 23 7.208	−0.152	C	+15 36 39.21	+0.51
8.4	Ry		C	9 23 1.571	−.199	C	+15 37 6.00	+.70
13.4	Ry		C	9 22 34.738	−.212	C	+15 39 13.99	+1.19
14.4	M		C	9 22 29.590	−.230	C	+15 39 37.39	+.29
15.4	Bn		C	9 22 24.588	−.192	C	+15 40 1.55	+.55
1925								
Jan. 7.1	P		C	9 38 16.198	−.162	C	+14 27 2.75	+.45
15.1	Bn		C	9 37 33.497	−.163	C	+14 30 44.49	+1.09
21.1	P		C	9 36 58.516	−.174	C	+14 33 43.14	+.14
31.0	Ry		C	9 35 56.149	−.171	C	+14 39 0.70	.00
Feb. 1.0	P		C	9 35 49.756	−.134	C	+14 39 33.59	+.29
5.0	Ry		C	9 35 23.793	−.137	C	+14 41 44.94	+.44
8.0	Ry		C	9 35 4.140	−.160	C	+14 43 23.77	+.27
9.0	P		C	9 34 57.533	−.207	C	+14 43 57.33	+.83
13.0	P		C	9 34 31.312	−.158	C	+14 46 8.43	+.13
19.0	Bn		C	9 33 52.086	−.174	C	+14 49 25.34	+.84
20.0	Bn		C	9 33 45.638	−.152	C	+14 49 57.49	+.69
21.0	P	W	C	9 33 39.104	−.236	C	+14 50 29.08	+.08

VESTA[1]

Date	Obsr.	Cl.	Limb	App. R. A. of Center	Corr. to Am. Eph.	Limb	App. Decl. of Center	Corr. to Am. Eph.
1916								
Jan. 2.8	S	E		13 14 36.210			−0 19 29.67	
3.8	P			13 15 53.390			−0 23 54.63	
7.8	S			13 20 54.635			−0 40 19.39	
18.7	M			13 33 36.998			−1 14 43.23	
23.7	Sr	E		13 38 46.832			−1 24 48.20	
Apr. 10.5	M	W		13 39 49.392			+3 24 15.62	
12.5	Sr			13 37 59.179			+3 34 43.28	
15.5	S			13 35 12.244			+3 49 12.74	
18.5	P	W		13 32 25.402			+4 2 3.88	
May 10.4	P	E		13 15 11.825			+4 34 6.54	
17.4	S			13 11 56.681			+4 19 23.61	
31.4	M			13 9 39.305			+3 17 26.16	
June 3.3	M			13 9 54.666			+2 59 9.55	
12.3	Sr			13 12 11.998			+1 55 37.75	
13.3	Sr	E		13 12 35.371			+1 47 50.22	

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[1] No correction has been applied for parallax to the observed declination of Vesta.

Sun (*Obs.−Eph.*)

Year	Δα	No.	Δδ	No.	Obsr.	Δα	No.	Δδ	No.
	s		″			s		″	
1918	+0.100	32	+0.52	33	M	+0.070	57	+0.31	57
1919	+ .063	92	+ .30	94	P	+ .060	178	+ .26	180
1920	+ .045	74	+ .26	76	Sr	+ .077	35	+ .35	36
1921	+ .047	88	+ .17	88	Bn	+ .070	144	+ .24	148
1922	+ .067	94	+ .30	95	Ry	+ .060	167	+ .24	173
1923	+ .063	101	+ .19	104					
1924	+ .078	97	+ .21	96					
1925	+ .096	7	+ .88	8					
Total	+ .064	585	+ .26	594					

Mercury (*Obs.−Eph.*)

Year	Δα	No.	Δδ	No.	Obsr.	Δα			Δδ
						C	I	II	
	s		″			s	s	s	″
1918	+0.099	14	−0.37	14	M	+0.049	+0.018	+0.089	−0.13
1919	+ .083	53	− .28	48	P	+ .142	+ .064	+ .100	− .45
1920	+ .072	40	− .23	39	Sr	+ .194	+ .092	+ .048	− .25
1921	+ .079	37	− .29	38	Bn		+ .116	+ .086	− .18
1922	+ .094	46	− .17	46	Ry	+ .085	+ .095	+ .084	− .10
1923	+ .097	36	− .04	36					
1924	+ .129	40	− .38	39	Total	+ .108	+ .087	+ .090	− .25
Total	+ .092	266	− .24	260					

Venus (*Obs.−Eph.*)

Conj.	Δα	No.	Δδ	No.	Obsr.	Δα		Δδ	
						I	II	N	S
	s		″			s	s	″	″
1919.7	+0.013	29	−0.67	27	M	+0.038	−0.015	−0.88	+0.25
1921.3	− .019	32	− .25	31	P	− .016	+ .078	− .14	− .47
1922.9	+ .051	31	.00	30	Sr	− .032	+ .003	− .96	− .52
1924.5	+ .029	30	− .06	31	Bn	− .012	+ .075	− .26	− .11
					Ry	− .075	+ .060	+ .19	− .39
Total	+ .019	122	− .24	119	Total	− .031	+ .062	− .17	− .31

Moon (*O−C*)

Year	Am. Eph. Δα	Tab. Long. Δλ	No.	Am. Eph. Δδ	Tab. Lat. Δβ	No.
	s	″		″	″	
1913	+0.727	−0.72	46	+2.01	+0.08	43
1914	+ .781	− .17	67	+1.03	+ .28	62
1915	+ .784	− .06	70	+ .31	+ .09	62
1916	+ .865	+ .72	73	+ .33	− .10	64
1917	+ .892	+1.14	33	−1.77	+ .41	24
1918	+ .820	+ .39	63	− .69	− .10	58
1919	+ .724	− .19	39	+ .80	− .33	46
1920	+ .800	+ .44	79	− .17	+ .07	88
1921	+ .828	+ .04	83	− .17	− .05	81
1922	+ .808	+ .20	73	+ .19	− .18	67
1923	+ .443	− .07	81	− .42	− .49	76
1924	+ .449	− .04	76	− .28	− .53	70
1925	+ .407	− .43	14	− .79	− .95	17

Moon, Longitude, Means by Lunations (0−C)

	January	February	March	April	May	June	July	August	September	October	November	December	Mean
	″	″	″	″	″	″	″	″	″	″	″	″	″
1913								-1.96_{9}	-0.80_{8}	-0.70_{10}	-0.05_{10}	-0.18_{9}	-0.72_{46}
1914	$+0.53_{7}$	$+0.50_{3}$	-0.80_{7}	-0.60_{8}	$+0.40_{3}$	-0.51_{7}	$+0.62_{6}$		-0.70_{9}	-0.23_{7}	-0.77_{3}	$+0.42_{4}$ $+0.40_{6}$	-0.01_{70}
1915	$+1.56_{5}$		$+0.02_{8}$ -0.37_{9}	-0.55_{2}		-0.11_{8}	-0.32_{5}		-0.86_{10}	-1.10_{6}	$+0.14_{5}$	$+1.12_{9}$	-0.05_{67}
1916	$+0.66_{5}$	$+0.88_{4}$	$+0.57_{9}$	-0.10_{8}	$+0.70_{3}$	$+0.50_{5}$	$+0.40_{4}$	-0.80_{1}	$+1.35_{8}$	$+1.06_{8}$	$+0.91_{10}$	$+0.84_{8}$	$+0.71_{73}$
1917	$+1.36_{5}$	$+1.30_{6}$	$+1.45_{4}$	$+0.85_{8}$	$+1.12_{6}$	$+0.92_{4}$							$+1.14_{33}$
1918	$+0.16_{5}$	$+0.35_{9}$	$+1.04_{12}$	$+1.04_{5}$	-0.18_{9}	-0.63_{7}				$+1.06_{7}$	$+0.23_{7}$	-0.20_{2}	$+0.39_{63}$
1919	-0.10_{5}	-0.07_{3}	$+0.10_{5}$	$+1.03_{3}$	-0.10_{1}	-0.58_{6}	-0.70_{1}	-0.74_{5}	-1.00_{2}	-0.50_{3}	$+0.50_{3}$		-0.19_{37}
1920	$+0.46_{5}$	$+1.28_{5}$	$+1.55_{4}$	$+0.50_{8}$	$+0.07_{6}$	$+0.37_{11}$ $+0.28_{6}$	$+0.49_{7}$	-1.85_{4}	$+0.82_{11}$	$+0.14_{10}$	$+0.10_{4}$	-0.30_{1}	$+0.39_{82}$
1921	$+0.27_{6}$	$+1.50_{5}$	$+0.65_{6}$	-0.12_{6}	-0.60_{9}	-0.26_{8}	-0.34_{8}	-1.13_{10}	$+0.16_{5}$	$+0.53_{9}$	$+1.18_{4}$	$+0.47_{6}$	$+0.05_{82}$
1922	$+0.90_{6}$	$+0.62_{5}$	$+0.21_{9}$		$+0.04_{8}$	-0.55_{6}	$+0.12_{4}$	-1.23_{3}	-0.10_{8}	$+0.21_{9}$	$+0.55_{9}$	$+0.75_{6}$	$+0.20_{73}$
Mean	+0.64	+0.80	+0.44	+0.26	+0.22	−0.06	+0.16	−1.38	−0.14	+0.05	+0.31	+0.40	
1923	$+0.33_{3}$ $+0.43_{3}$		-0.32_{5} $+0.03_{6}$	$+0.17_{6}$	$+0.22_{8}$	-0.04_{5}	$+0.03_{7}$	-0.60_{7}	-0.11_{9}	$+0.26_{7}$	-0.34_{9}	-0.43_{6}	-0.07_{81}
1924	-0.27_{6}	-0.20_{3}	$+0.37_{7}$	$+0.08_{5}$	$+0.15_{4}$	-0.93_{3}	-0.09_{9}	$+0.13_{7}$	-0.05_{8}	-0.50_{8}	$+0.15_{6}$	$+0.05_{8}$	-0.06_{74}
1925	-0.23_{10}	-0.43_{6}											-0.30_{16}
Mean	−0.02	−0.32	+0.03	+0.12	+0.18	−0.48	−0.03	−0.23	−0.08	−0.12	−0.10	−0.19	

Moon, Latitude, Means by Lunations (0−C)

	January	February	March	April	May	June	July	August	September	October	November	December	Mean
	″	″	″	″	″	″	″	″	″	″	″	″	″
1913								$+0.37_{7}$	$+0.20_{6}$	-0.18_{9}	-0.12_{11}	-0.21_{9}	-0.02_{42}
1914	-0.57_{7}	$+1.03_{3}$	-0.13_{6}	$+0.93_{7}$	-0.63_{3}	-0.30_{7}	$+0.25_{4}$		-0.01_{7}	$+0.61_{7}$	$+2.00_{3}$	$+0.50_{4}$ $+0.31_{7}$	$+0.25_{65}$
1915	$+0.22_{4}$		$+0.27_{7}$ $+0.51_{7}$	-0.35_{2}		-0.57_{7}	-0.77_{4}		-0.11_{9}	-0.52_{6}	$+1.30_{5}$	$+0.42_{8}$	$+0.07_{59}$
1916	-0.08_{4}	$+0.17_{3}$	$+0.09_{8}$	$+0.17_{7}$	$+0.40_{3}$	-0.77_{4}	-1.77_{3}		-0.20_{6}	-0.12_{8}	-0.12_{9}	$+0.47_{9}$	-0.07_{64}
1917	$+0.42_{4}$	$+0.22_{4}$	$+0.05_{2}$	$+0.41_{7}$	$+1.08_{5}$	-0.55_{2}							$+0.41_{24}$
1918	-0.10_{5}	-0.45_{8}	$+0.16_{10}$	-0.82_{4}	-0.11_{9}	$+0.29_{7}$				-0.03_{6}	-0.13_{6}	-0.03_{3}	-0.10_{58}
1919	-0.26_{5}	-0.12_{4}	-0.60_{7}	$+0.07_{3}$	-1.70_{2}	-0.58_{6}	-2.00_{1}	-0.26_{7}	-0.60_{2}	-0.40_{3}	$+0.57_{4}$		-0.38_{44}
1920	-0.68_{5}	$+0.13_{6}$	-0.20_{6}	$+0.78_{10}$	0.00_{10}	-0.04_{10} -0.22_{5}	-0.30_{7}	$+0.67_{6}$	$+0.25_{10}$	$+0.42_{9}$	-0.37_{3}		$+0.10_{90}$
1921	-0.46_{5}	-0.50_{5}	$+0.03_{7}$	$+0.28_{5}$	-0.16_{8}	$+0.16_{7}$	-0.29_{7}	$+0.04_{11}$	-0.31_{8}	$+0.41_{8}$	$+0.32_{5}$	-0.34_{5}	-0.05_{81}
1922	-0.68_{5}	-0.92_{5}	-0.61_{5}	-0.70_{2}	$+0.07_{6}$	$+0.08_{4}$	-0.50_{5}	-0.16_{5}	-0.52_{6}	$+0.43_{7}$	$+0.45_{8}$	$+0.18_{6}$	-0.18_{67}
Mean	−0.24	−0.06	−0.04	+0.09	−0.13	−0.25	−0.57	+0.13	−0.16	+0.07	+0.43	+0.16	
1923	-3.10_{2} -0.18_{4}		-0.92_{4} -0.70_{6}	-0.40_{6}	-0.37_{6}	-0.53_{3}	-0.32_{5}	-0.02_{9}	-0.28_{8}	-0.67_{10}	-0.71_{7}	-0.05_{6}	-0.49_{76}
1924	-0.36_{5}	-0.82_{4}	-0.89_{7}	$+0.16_{5}$	-0.03_{3}	-1.20_{1}	-0.16_{8}	-0.60_{7}	-0.70_{6}	-0.54_{11}	-0.75_{6}	-0.77_{7}	-0.53_{70}
1925	-1.37_{7}	-0.65_{10}											-0.95_{17}
Mean	−0.64	−0.74	−0.84	−0.12	−0.20	−0.53	−0.24	−0.31	−0.49	−0.60	−0.73	−0.41	

Mars (*Obs.*—*Tab.*)

Opp.	Δα	No.	Δδ	No.	α	δ
	s		″		h	°
1914.0	−0. 022	20	+0. 11	21	7. 0	+26
1916.1	+ . 009	16	+ . 11	17	9. 5	+19
1918.2	+ . 036	19	− . 23	20	11. 9	+ 5
1920.3	+ . 027	20	− . 22	21	14. 0	−11
1922.4	+ . 051	20	− . 32	20	17. 1	−25
1924.6	− . 021	20	− . 20	20	22. 4	−17
Total	+ . 013	115	− . 13	119		

Jupiter (*Obs.*—*Eph.*)

Opp.	Δα	No.	Δδ	No.	α	δ
	s		″		h	°
1914.6	+0. 020	15	+0. 68	15	21. 3	−17
1915.7	+ . 015	15	+ . 35	15	23. 6	− 4
1916.8	+ . 024	15	+ . 19	15	2. 0	+10
1917.9						
1919.0	+ . 009	15	− . 21	16	6. 7	+23
1920.1	+ . 023	15	+ . 67	15	9. 1	+17
1921.1	+ . 012	15	− . 53	15	11. 1	+ 7
1922.2	+ . 044	14	− . 32	15	12. 9	− 4
1923.3	+ . 028	15	− . 21	15	14. 8	−15
1924.4	+ . 024	14	− . 15	16	16. 9	−22
1925.4	− . 006	12	. 00	12	19. 5	−22
Total	+ . 019	145	− . 09	149		

Saturn (*Obs.*—*Eph.*)

Opp.	Δα	No.	Δδ	No.	α	δ
	s		″		h	°
1913.9	−0. 083	15	−0. 02	15	4. 9	+21
1915.0	− . 073	15	− . 35	15	5. 9	+22
1916.0	− . 081	16	− . 21	16	6. 9	+22
1917.0	− . 090	15	+ . 12	15	7. 9	+21
1918.1	− . 131	15	+ . 04	15	8. 8	+19
1919.1	− . 095	16	+ . 58	16	9. 8	+14
1920.2	− . 113	15	+ . 46	15	10. 7	+10
1921.2	− . 129	15	+ . 44	15	11. 5	+ 5
1922.2	− . 123	15	+ . 79	15	12. 3	+ 1
1923.3	− . 106	15	+ . 05	16	13. 1	− 4
1924.3	− . 116	15	+ . 59	15	13. 8	− 8
Total	− . 103	167	+ . 22	168		

Uranus (*Obs.*−*Eph.*)

Opp.	Δα	No.	Δδ	No.	α	δ
	s		″		h	°
1914.6	+0. 161	16	+0. 59	16	20. 8	−19
1915.6	+ . 134	15	+ . 07	15	21. 0	−18
1916.6	+ . 142	16	+ . 52	15	21. 3	−16
1917.7						
1918.8						
1919.7	+ . 121	15	+ . 41	16	22. 1	−12
1920.7	+ . 120	16	+ . 69	16	22. 4	−11
1921.7	+ . 114	15	+1. 09	15	22. 6	− 9
1922.7	+ . 127	16	+1. 30	17	22. 9	− 8
1923.7	+ . 131	15	+1. 22	15	23. 1	− 6
1924.7	+ . 145	15	+1. 47	15	23. 4	− 5
Total	+ . 133	139	+ . 82	140		

Neptune (*Obs.*−*Eph.*)

Opp.	Δα	No.	Δδ	No.	α	δ
	s		″		h	°
1914.1	−0. 127	12	−0. 16	12	7. 9	+20
1915.1	− . 126	13	− . 26	14	8. 1	+20
1916.1	− . 110	12	− . 16	12	8. 2	+20
1917.1	− . 123	15	+ . 20	15	8. 4	+19
1918.1	− . 136	15	− . 08	15	8. 5	+19
1919.1	− . 136	16	+ . 14	16	8. 7	+18
1920.1	− . 176	15	− . 10	15	8. 8	+18
1921.1	− . 174	14	+ . 24	15	8. 9	+17
1922.1	− . 180	15	+ . 40	16	9. 1	+17
1923.1	− . 195	15	+ . 39	15	9. 3	+16
1924.1	− . 194	13	+ . 64	13	9. 4	+15
1925.1	− . 169	12	+ . 44	12	9. 6	+15
Total	− . 154	167	+ . 14	170		

CATALOGUE

OF

9,989 STANDARD AND INTERMEDIARY STARS

+90° TO −36° DECLINATION

OBSERVED IN THE YEARS 1913 TO 1926
REDUCED WITHOUT PROPER MOTION

TO THE

EQUINOX 1920.0

EXPLANATION OF THE CATALOGUE

The ordinal *numbers* in the first column are for convenience of reference. There are 2,438 fundamental and standard stars between +90° and −36° 5′ declination and 7,551 intermediary stars between +90° and −30° declination.

The *names* of all standard stars are taken from (1) Eichelberger's "1,504 Standard Stars", (2) "Provisional General List of Fundamental Stars," Supl. Connaissance des Temps 1914, and (3) a few are from other sources. Thus the standard stars are all designated by names. The newer standards added by Backlund and Hough are not distinguished from the older fundamentals except that they have no comparison with Eichelberger on pp. 343–365. The intermediary stars are all designated by their numbers in the Bonner or Cordoba Durchmusterungs. For double stars the component observed is indicated after the name and an explanation is given in a footnote.

The *spectral types* are from the Henry Draper catalogue. Composite spectra are given in footnotes indicated by asterisks.

The *magnitudes* given to 0.01 in column 4 are the Harvard photometric, and those given to 0.1 the Durchmusterung corrected. The magnitudes in italics are Bonn determinations based on the Potsdam photometry. The limiting magnitudes of variable stars, indicated by "Var.," are given in the footnotes.

The *observed magnitudes* are those deduced from the observed screen readings and reduced to the zenith for absorption. The mean observed magnitude of three or more nights is given to 0.01; less accurate determinations to 0.1.

The *right ascensions* and *declinations*, 1920, represent the independent instrumental system described in the preceding pages. The positions are for mean equator and equinox 1920.0 and for the epoch of observation column 13.

The *precessions* and *secular variations* are based on Newcomb's precession constants for 1920.

The annual *proper motions* correspond largely to the Boss system. Those computed here, or elsewhere, by comparison between two catalogues and hence less definitive, are distinguished by being given to one less decimal.

When for any star two numbers are found under *number of observations* or under *epoch* the first applies to right ascension, the second to declination. The mean year in excess of 1900 is given.

The *footnotes* refer to the ordinal numbers. These relate chiefly to double stars. When for a double star the mean was observed, the note gives the magnitudes of both components and their distance and position angle for 1920. Where one component was observed, the note gives the magnitude of the other component and its distance and angle.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1	CD−26° 16889	G0	8.3	8.64	0 0 1.822	+3.0726	−0.0129	+0.0093	−26 20 13.60	+20.045	−0.009	−0.038	4	18.07
2	BD−18° 6419	A0	8.7	8.4	0 9.685	3.0724	− .0077	+ .0006	−17 52 11.70	20.045	.009	− .010	5	17.56
3	BD+71° 1249		9.02		0 25.63	3.0802	+ .0915	− .0002	+71 31 23.56	20.045	.009	+ .008	4	18.96
4	BD+22° 4950	G5	7.87	7.7	0 47.567	3.0747	+ .0145	+ .027	+22 49 27.93	20.045	.010	.00	4	18.33
5	BD+63° 2103	F5	7.97	7.98	0 47.75	3.0824	+ .0643	− .0054	+64 20 9.53	20.045	.009	+ .006	4	19.14
6	BD+50° 4233	K2	8.20	7.82	0 0 49.872	+3.0786	+ .0386	+ .002	+50 44 7.53	+20.045	− .010	+ .02	4	19.14
7	BD− 8° 6241	K0	9.4	9.1	0 50.788	3.0720	− .0022	− .002	− 7 43 19.44	20.045	.010	+ .04	4	19.05
8	BD+17° 5031	K0	8.71	8.68	0 50.885	3.0743	+ .0116	+ .004	+17 58 39.97	20.045	.010	− .06	4	18.98
9	BD+46° 4251	G5	9.01	8.40	0 52.740	3.0781	+ .0336	− .007	+46 34 4.43	20.045	.011	+ .09	5	20.56
10	Lal 47216	G5	6.57	6.29	0 54.053	3.0754	+ .0173	+ .0055	+27 13 46.38	20.045	.010	− .006	5	20.54
11	BD+37° 4932		9.58		0 0 54.940	+3.0768	+ .0249	+ .001	+37 29 59.24	+20.045	− .010	− .01	5	20.75
12	Grmb 4223	A0	6.51	6.42	1 2.644	3.0788	+ .0317	− .0019	+44 47 2.73	20.045	.011	− .018	4	18.84
13	33 Piscium	K0	4.68	4.75	1 14.457	3.0719	− .0013	− .0013	− 6 9 17.88	20.045	.012	+ .090	4	19.96
14	BD+87° 220		9.00	9.1	1 23.47	3.254	+ .750	− .012	+87 26 37.66	20.045	.009	+ .024	4	19.14
15	BD−10° 6227	F5	7.11	7.16	1 25.040	3.0712	− .0033	+ .0069	−10 3 40.63	20.045	.012	− .052	4	19.60
16	BD−16° 6415	K5	8.4	8.61	0 1 37.903	+3.0700	− .0065	+ .0016	−15 48 40.10	+20.045	− .012	− .012	4	19.26
17	Lal 47251	G5	6.71	6.43	1 56.780	3.0822	+ .0272	+ .0002	+39 58 23.78	20 044	.012	− .006	4	19.56
18	BD+70° 1345		9.40		2 7.65	3.1078	+ .0881	+ .0230	+70 31 25.10	20.044	.012	− .033	4	19.30
19	BD+47° 4381		9.0	8.97	2 26.622	3.0885	+ .0354	+ .003	+47 53 40.91	20.044	.013	+ .04	4	18.10
20	BD+28° 4704	K0	6.20	6.1	2 27.332	3.0805	+ .0183	+ .0288	+28 34 48.51	20.044	.013	− .176	4	19.06
21	BD−19° 6567		9.5		0 2 41.327	+3.0672	− .0083	+ .0030	−19 14 49.95	+20.044	− .013	+ .010	4	20.00
22	Rad (90) 1	F0	6.06	6.05	2 44.617	3.0657	− .0110	+ .0077	−23 33 6.88	20.044	.014	− .046	4	19.75
23	BD+ 1° 4832	F8	9.09	9.18	2 46.081	3.0731	+ .0027	+ .0035	+ 1 24 55.65	20.044	.014	+ .005	5	17.96
24	BD+34° 5067		9.0	8.83	3 2.606	3.0849	+ .0226	+ .013	+34 24 30.46	20.043	.015	+ .13	4 5	18.29 17.42
25	BD+20° 5430	G5	9.05	9.2	3 11.305	3.0797	+ .0132	+ .0004	+20 31 28.90	20.043	.013	− .263	4	18.52
26	BD+38° 2	F5	8.00	7.80	0 3 32.894	+3.0892	+ .0261	− .0084	+38 35 26.94	+20.043	− .015	− .058	4	18.50
27	Brad 3213	B8	6.33	5.9	3 38.192	3.0716	+ .0005	+ .0018	− 2 59 38.58	20.043	.015	+ .004	4	17.88
28	BD−11° 2	G5	8.8	8.12	3 42.981	3.0683	− .0040	.0000	−11 34 27.65	20.043	.015	+ .006	5	18.32
29	BD− 0° 2	F5	9.8	9.4	3 43.791	3.0726	+ .0019	+ .0054	− 0 18 52.21	20.043	.015	− .027	4	19.08
30	CD−28° 11		10.0		3 46.962	3.0610	− .0136	+ .0016	−27 54 10.88	20.043	.015	− .006	4	19.82
31	BD+58° 1	B9	9.17	8.8	0 4 2.560	+3.1116	+ .0525	.000	+58 46 14.33	+20.042	− .016	− .01	4	18.40
32	5 Ceti	K0	6.32	6.94	4 6.268	3.0715	+ .0006	+ .0003	− 2 53 34.64	20.042	.016	− .005	4	18.69
33	BD+49° 3	A0	8.0	7.92	4 14.671	3.1020	+ .0381	+ .005	+49 48 0.64	20.042	.017	+ .02	4	19.28
34	α Andromedæ	A0	2.15	2.00	4 14.894	3.0863	+ .0186	+ .0106	+28 38 55.71	20.042	.017	− .161	91 81	20.36 20.47
35	BD−22° 6	G5	8.4	8.29	4 19.968	3.0626	− .0098	+ .0095	−21 51 17.61	20.041	.017	+ .055	4	18.79
36	BD+52° 8	F2	7.75	7.98	0 4 24.702	+3.1066	+ .0423	+ .0097	+52 48 32.18	+20.041	− .017	− .023	4	18.31
37	BD+42° 7		9.44		4 30.883	3.0975	+ .0307	− .003	+43 19 58.52	20.041	.017	− .02	6	21.11
38	BD− 1° 1	A2	9.77		4 45.695	3.0719	+ .0013	− .0018	− 1 35 8.41	20.041	.018	− .022	4	18.39
39	β Cassiopeiæ	F5	2.42	2.6	4 53.844	3.1197	+ .0528	+ .0678	+58 42 31.05	20.041	.018	− .181	4	18.69
40	BD+31° 3		9.2	9.35	5 5.889	3.0913	+ .0210	+ .0105	+32 1 59.66	20.040	.018	− .058	4	18.66
41	Lal 47354	G0	7.17	7.19	0 5 12.454	+3.0820	+ .0114	− .0011	+17 5 29.87	+20.040	− .018	− .136	4	18.92
42	BD+11° 5		9.1		5 22.671	3.0793	+ .0085	+ .004	+11 56 7.43	20.040	.018	− .02	4	19.03
43	BD+83° 1	F5	8.25	8.6	5 23.60	3.3578	+ .3203	+ .0260	+83 42 24.27	20.040	.019	.000	4	19.11
44	BD+25° 9 br.	K0	8.74	8.58	5 28.836	3.0885	+ .0171	+ .0016	+26 14 14.03	20.039	.019	+ .017	4	19.13
45	BD+ 8° 8		9.40		5 52.725	3.0780	+ .0068	+ .003	+ 8 45 17.88	20.039	.020	+ .02	4	18.97
46	22 Andromedæ	F0	5.08	5.15	0 6 9.357	+3.1094	+ .0335	+ .0004	+45 37 37.75	+20.038	− .020	− .001	4	18.54
47	BD+ 4° 9		9.44		6 10.672	3.0755	+ .0045	+ .0069	+ 4 26 46.88	20.038	.020	+ .034	4	18.79
48	Oelt 46	B8	6.54	6.51	6 17.596	3.1286	+ .0493	+ .0042	+56 43 13.19	20.038	.021	+ .005	4	18.78
49	BD+54° 7	A7	Var.	8.48	6 30.527	3.1258	+ .0454	+ .003	+54 26 47.21	20.037	.022	+ .01	4	18.82
50	BD+12° 8		8.6	9.4	6 33.344	3.0814	+ .0091	+ .006	+12 46 39.77	20.037	.021	+ .02	4	18.28
51	Wi (1) 0^h 46	K0	5.94	5.82	0 6 37.033	+3.0638	− .0046	+ .0103	−13 1 27.22	+20.037	− .022	− .025	4	18.48
52	BD+24° 10	F5	9.2	8.93	6 39.753	3.0868	+ .0160	− .0070	+24 22 27.02	20.037	.022	− .121	5	18.67
53	BD+ 9° 12	K0	8.51	8.34	7 7.969	3.0802	+ .0077	.000	+10 11 27.09	20.035	.021	+ .02	4	19.03
54	CD−26° 42	A3	9.3		7 24.963	3.0510	− .0124	− .0001	−26 41 46.65	20.035	.023	− .078	4	19.74
55	BD+18° 11	K0	7.90	8.31	7 28.149	3.0872	+ .0124	+ .0036	+18 27 55.66	20.035	.023	+ .018	4	19.40
56	BD− 5° 17	K2	8.4	8.40	0 7 30.125	+3.0685	− .0006	+ .001	− 5 30 48.25	+20.034	− .023	+ .02	4	19.50
57	κ¹ Sculptoris	K0	5.56	5.4	7 30.827	3.0492	− .0134	+ .0013	−28 14 42.90	20.034	.023	+ .017	4	19.58
58	Grmb 7 br	A0	7.23	7.16	7 34.27	3.1704	+ .0724	+ .0016	+65 40 52.78	20.034	.023	+ .013	4	19.10
59	θ Sculptoris	F5	5.19		7 40.214	3.0407	− .0186	+ .0129	−35 34 51.36	20.034	.023	+ .120	4	19.58
60	BD+ 5° 10		9.4	8.7	7 49.412	3.0776	+ .0056	.000	+ 6 7 59.11	20.034	.024	+ .03	4	18.29

44. 14^m, 37.9, 106°. 49. 9.8 to 11.0. 58. 10^m, 17.5, 205°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
61	BD+35° 22		*9.00*	8 8	0 7 50.751	+3.1053	+0.0241	+0.005	+35 27 44.55	+20.033	−0.024	0.00	[illegible]	18.56
62	BD+21° 10	Ma	7.82	7.4	8 7.897	3.0920	+ .0146	.000	+22 6 41.02	20.032	.024	− .01	[illegible]	18.52
63	BD+51° 21	G5	9.03	8.65	8 35.454	3.1367	+ .0420	+ .004	+51 56 3.93	20.031	.026	.00	[illegible]	19.15
64	BD+15° 11	K0	8.7	8.8	8 54.721	3.0872	+ .0107	− .003	+15 32 10.60	20.030	.026	+ .01	[illegible]	18.52
65	γ Pegasi	B2	2.87	3.16	9 6.830	3.0867	+ .0103	.0000	+14 44 20.08	20.029	.026	− .013	94 72	20.25 20.16
66	BD+ 8° 17	F0	*7.81*	7.79	0 9 12.477	+3.0807	+ .0069	+ .001	+ 8 29 6.44	+20.029	− .026	− .02	[illegible]	18.29
67	CD−24° 51	F0	8.0	7.99	9 13.962	3.0485	− .0108	+ .0044	−24 10 39.40	20.029	.026	+ .012	4	19.07
68	BD−16° 28		9.3		9 17.929	3.0572	− .0060	− .006	−15 56 24.92	20.029	.026	− .01	4	18.60
69	BD+41° 19		*9.44*	9.1	9 18.513	3.1216	+ .0301	− .001	+41 59 47.28	20.029	.026	− .01	[illegible]	18.95
70	BD+72° 10		*8.05*	8.02	9 41.77	3.2570	+ .1111	− .0043	+72 56 45.59	20.027	.028	− .002	[illegible]	20.19
71	BD+29° 25	G5	*9.41*		0 9 49.682	+3.1057	+ .0200	+ .0016	+29 58 20.33	+20.027	− .028	.000	[illegible]	18.19
72	BD+33° 19		*9.13*	9.2	9 56.004	3.1111	+ .0228	+ .002	+33 35 6.20	20.026	.028	− .03	[illegible]	18.57
73	BD− 8° 24	F5	8.2	7.32	10 4.511	3.0648	− .0015	+ .008	− 7 38 32.97	20.026	.028	− .08	[illegible]	19.23
74	BD− 9° 30	K0	7.98	8.40	10 11.633	3.0630	− .0024	− .001	− 9 16 36.86	20.026	.028	− .02	[illegible]	19.46
75	BD+ 4° 22	A5	*8.98*	9.20	10 15.092	3.0774	+ .0047	− .0004	+ 4 26 28.60	20.025	.029	− .012	[illegible]	18.36
76	BD−19° 19	A2	9.28		0 10 23.331	+3.0512	− .0080	+ .006	−19 32 37.77	+20.025	− .028	+ .02	4	19.52
77	BD−18° 27		9.8		10 23.612	3.0534	− .0069	− .0009	−17 41 20.16	20.025	.029	+ .008	[illegible]	19.29
78	BD+60° 13	K0	*8.40*	8.46	10 50.14	3.1882	+ .0609	− .001	+61 19 21.61	20.023	.030	.00	4	19.07
79	35 Piscium *br.*	F0	6.03	6.5	10 51.446	3.0820	+ .0069	+ .0066	+ 8 22 36.49	20.023	.030	− .024	[illegible]	19.46
80	BD+62° 31		*8.65*	9.3	10 53.79	3.1990	+ .0664	+ .003	+63 17 56.22	20.022	.030	− .03	[illegible]	19.55
81	BD+14° 15		*9.48*	9.3	0 10 58.814	+3.0894	+ .0103	+ .003	+14 38 18.07	+20.022	− .030	+ .01	[illegible]	19.01
82	BD−13° 35	A5	8.6	8.09	11 19.971	3.0569	− .0045	+ .0034	−13 29 56.00	20.020	.030	− .012	4	19.05
83	BD+48° 52		9.5		11 27.619	3.1492	+ .0383	+ .002	+48 51 31.51	20.020	.032	.00	[illegible]	19.84
84	BD− 0° 26	K5	9.8		11 37.892	3.0723	+ .0023	+ .0009	− 0 19 35.08	20.019	.031	− .009	[illegible]	19.75
85	318 B Cephei *m.*	B9	6.23	6.46	11 40.15	3.3561	+ .1497	+ .0069	+76 30 22.66	20.019	.033	− .001	9	19.34
86	BD+45° 46		*9.41*		0 11 49.234	+3.1449	+ .0352	− .004	+46 20 35.72	+20.018	− .033	.00	4	19.72
87	Lal 205	A0	7.02	7.27	11 50.802	3.0773	+ .0043	+ .0015	+ 3 48 24.26	20.018	.032	− .009	4	19.24
88	BD+16° 16	G0	*9.27*	9.2	11 51.904	3.0940	+ .0119	+ .003	+17 7 8.76	20.018	.032	.00	5	20.15
89	BD−21° 21		9.2		11 52.728	3.0463	− .0086	+ .002	−20 51 39.73	20.018	.032	− .01	4	19.30
90	BD+27° 30	A3	*9.36*		12 7.163	3.1094	+ .0184	− .001	+27 28 14.38	20.017	.032	.00	4	18.12
91	BD+ 7° 26		*9.30*		0 12 16.280	+3.0827	+ .0067	.000	+ 7 55 53.21	+20.016	− .033	.00	4	19.55
92	BD+ 1° 28	Ma	7.29	6.75	12 33.294	3.0745	+ .0033	− .0003	+ 1 24 20.73	20.015	.033	+ .022	4	19.06
93	BD−22° 38	F8	9.5		12 34.200	3.0430	− .0093	+ .0024	−22 2 41.84	20.015	.033	+ .055	4	20.02
94	Wi (2) 0^h 253	K0	7.18	7.03	12 45.884	3.1040	+ .0154	+ .0019	+22 48 43.31	20.014	.034	− .022	4	18.58
95	θ Andromedæ	A2	4.44	4.70	12 54.358	3.1320	+ .0270	− .0041	+38 14 14.78	20.013	.034	− .020	4	18.47
96	BD+38° 25		*9.47*	9.1	0 13 25.819	+3.1355	+ .0276	+ .007	+38 45 43.54	+20.011	− .036	+ .03	6	21.15
97	BD− 3° 30	G0	9.5	8.4	13 26.973	3.0682	+ .0009	+ .0038	− 3 19 41.89	20.011	.035	+ .047	4	19.31
98	BD+56° 34	A7	*9.12*	8.8	13 28.996	3.1942	+ .0523	− .003	+57 6 30.32	20.011	.036	− .01	5	18.66
99	BD+58° 24	B5	*7.52*	7.86	13 32.369	3.2020	+ .0555	− .003	+58 36 47.78	20.010	.036	− .01	4	19.68
100	Wi (1) 0^h 176	G5	6.63	6.32	13 48.796	3.0903	+ .0092	.0000	+12 19 39.05	20.009	.036	− .019	4	19.01
101	BD+73° 6		*9.32*	8.3	0 13 57.44	+3.3452	+ .1201	− .0005	+73 22 47.62	+20.008	− .038	+ .003	4	20.07
102	σ Andromedæ	A2	4.51	4.65	14 8.514	3.1333	+ .0254	− .0056	+36 20 30.74	20.007	.037	− .044	[illegible]	19.05
103	Pi 0^h 38	A0	5.80	6.00	14 27.285	3.1235	+ .0212	+ .0067	+31 4 23.23	20.005	.037	− .003	[illegible]	18.54
104	Brad 13 *br.*	B9	6.08	6.00	14 28.714	3.1523	+ .0323	+ .0026	+43 20 49.06	20.005	.038	− .004	6 5	20.83 20.20
105	Wi (1) 0^h 185	G0	6.50	6.28	14 34.858	3.0600	− .0017	+ .0270	− 8 29 39.09	20.005	.037	− .124	5	20.76
106	BD−11° 44	F5	8.2	7.96	0 14 43.160	+3.0555	− .0033	+ .0004	−11 23 35.59	+20.004	− .038	− .020	[illegible]	18.77
107	BD+69° 14		*9.38*		14 44.67	3.3038	+ .0948	+ .0061	+69 36 18.64	20.004	.039	+ .007	4	19.51
108	BD+21° 24	K0	*8.93*	8.3	14 54.136	3.1077	+ .0149	− .002	+21 55 27.85	20.003	.038	.00	[illegible]	19.29
109	CD−23° 91		9.5		15 3.814	3.0348	− .0098	+ .0030	−23 21 23.79	20.002	.038	− .047	[illegible]	19.06
110	BD+13° 34	K0	8.2	7.98	15 8.754	3.0941	+ .0101	+ .004	+13 36 39.49	20.001	.038	− .01	4	19.08
111	BD+ 2° 36		*8.95*	8.8	0 15 12.993	+3.0768	+ .0041	+ .0023	+ 2 37 48.37	+20.001	− .038	− .008	4	18.53
112	BD+19° 43	K0	*7.48*	7.58	15 14.461	3.1043	+ .0136	+ .001	+19 33 20.18	20.001	.038	− .05	4	18.77
113	BD−15° 52	G5	9.2		15 18.855	3.0483	− .0053	− .0023	−15 16 35.94	20.001	.038	− .014	4	19.10
114	ι Ceti	K0	3.75	3.64	15 21.131	3.0581	− .0021	− .0012	− 9 16 2.34	20.000	.039	− .032	63 44	19.48 19.94
115	BD+49° 49		*8.20*	8.08	15 33.391	3.1819	+ .0412	− .003	+50 18 22.15	19.999	.040	− .01	[illegible]	18.84
116	BD+34° 37	A0	*9.13*	9.33	0 15 37.006	+3.1368	+ .0247	+ .002	+35 10 2.46	+19.999	− .039	− .03	4	18.88
117	BD+42° 55	F2	*8.79*	8.33	15 39.558	3.1561	+ .0314	− .004	+42 26 10.72	19.998	.040	+ .01	[illegible]	18.80
118	CD−28° 89	F8	9.6		15 51.245	3.0234	− .0127	− .0032	−28 6 2.94	19.997	.039	+ .006	[illegible]	19.30
119	BD+68° 14	F2	7.64	7.31	15 53.43	3.3066	+ .0894	+ .0149	+68 24 10.37	19.997	.042	.000	[illegible]	19.55
120	CD−25° 96	K0	7.58	7.57	15 55.935	3.0283	− .0111	+ .0010	−25 33 48.89	19.997	.039	− .112	[illegible]	19.63

79. $8^{m}0$, 12″, 149°.

85. $6^{m}8$-$7^{m}3$, 0″9, 76°.

104. $9^{m}8$, 6″1, 241°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
121	Lal 347	K0	6.88	6.59	0 15 59.549	+3.0422	−0.0068	+0.0024	−18 8 39.63	+19.996	−0.040	−0.013	4	19.72
122	BD−13° 52	G5	6.87	6.95	16 6.347	3.0502	− .0043	+ .0028	−13 30 21.19	19.996	.040	+ .022	4	19.36
123	BD+57° 61	A3	*9.10*		16 21.149	3.2216	+ .0538	− .002	+57 23 29.50	19.994	.042	− .01	4	19.82
124	BD+10° 31	K0	7.17	6.81	16 22.784	3.0904	+ .0083	− .002	+10 28 27.08	19.994	.041	− .02	4	18.28
125	d Piscium	K0	5.58	5.80	16 28.745	3.0858	+ .0069	− .0004	+ 7 44 45.84	19.993	.041	+ .014	5	20.91
126	BD+49° 54		9.2		0 16 32.367	+3.1855	+ .0402	+ .012	+49 28 47.52	+19.993	− .042	− .03	4	19.74
127	BD− 4° 29	Ma	8.95	9.04	16 44.077	3.0649	+ .0004	+ .0027	− 4 33 34.45	19.992	.041	− .018	4	19.58
128	BD+24° 30	F5	*8.89*	8.36	16 53.043	3.1176	+ .0168	+ .0043	+24 31 16.48	19.991	.042	− .022	4	19.23
129	ρ Andromedæ	F5	5.20	5.46	16 54.086	3.1483	+ .0268	+ .0054	+37 31 32.03	19.991	.043	− .044	5 4	19.30 19.93
130	BD+35° 53	A0	7.32	7.48	16 57.089	3.1430	+ .0249	− .003	+35 26 7.31	19.990	.042	− .02	4	19.46
131	BD+16° 22		*9.46*		0 16 57.127	+3.1029	+ .0121	.000	+17 0 17.60	+19.990	−.042	+ .02	5	20.17
132	BD+28° 43	G5	*9.30*	9.2	17 0.802	3.1264	+ .0195	+ .0018	+28 27 37.83	19.990	.042	+ .015	4	19.12
133	BD+39° 64	A0	8.92	9.10	17 14.037	3.1577	+ .0295	+ .002	+40 15 6.94	19.989	.043	− .01	5	20.25
134	ι Sculptoris	G5	5.35	5.22	17 30.194	3.0151	− .0132	+ .0033	−29 25 26.07	19.987	.042	− .069	4	18.50
135	BD+ 0° 43	A2	9.13	9.0	17 42.252	3.0736	+ .0031	+ .0003	+ 0 28 25.90	19.985	.042	− .035	4	18.53
136	BD+ 5° 40	K0	9.21	9.2	0 17 44.450	+3.0826	+ .0057	− .0026	+ 5 26 38.97	+19.985	− .042	− .109	4	18.98
137	BD+65° 43	F5	*8.45*	8.94	17 59.69	3.3052	+ .0788	+ .0005	+65 44 21.88	19.983	.046	− .091	4	18.73
138	BD+32° 53		*8.66*	8.87	18 7.708	3.1403	+ .0227	+ .001	+32 37 29.31	19.983	.045	− .03	4	18.20
139	BD+59° 40	F0	*9.23*	9.3	18 8.95	3.2563	+ .0607	+ .008	+60 4 13.91	19.983	.046	.00	4	19.24
140	BD+44° 70 *m.*		8.4	8.5	18 17.313	3.1773	+ .0340	+ .007	+44 29 0.67	19.981	.046	− .02	4	19.04
141	BD+53° 53	G5	7.30	7.02	0 18 28.622	+3.2219	+ .0481	+ .0001	+54 12 7.00	+19.980	− .047	− .001	5	18.40
142	BD+24° 42	G0	*9.69*	9.1	18 52.040	3.1244	+ .0173	+ .0001	+25 12 51.78	19.977	.046	+ .005	4	18.78
143	BD− 7° 48	K0	7.7	7.75	18 55.431	3.0594	− .0007	− .004	− 6 54 22.90	19.977	.045	.00	4	18.28
144	BD+31° 47		*9.24*	9.1	19 12.683	3.1410	+ .0218	+ .002	+31 24 25.73	19.975	.046	+ .02	4	19.00
145	BD+78° 11		*8.18*	8.43	19 17.79	3.6560	+ .2156	− .0209	+79 5 42.88	19.974	.053	+ .007	4	19.03
146	BD−19° 48	G5	7.16	7.15	0 19 22.346	+3.0331	− .0073	+ .0035	−19 20 4.74	+19.974	− .046	− .039	5	19.50
147	BD−21° 43	G5	9.8		19 25.415	3.0290	− .0082	+ .0036	−21 8 24.33	19.973	.046	− .011	5	18.77
148	BD− 1° 41	K0	8.4	8.88	19 34.577	3.0708	+ .0025	− .0006	− 0 59 4.92	19.972	.047	− .012	4	18.25
149	BD+48° 106	A0	*8.51*	8.40	19 41.096	3.2035	+ .0397	− .002	+48 45 29.50	19.971	.048	− .01	5	17.68
150	BD+18° 38		*9.15*		19 43.248	3.1127	+ .0136	− .003	+19 13 6.10	19.971	.047	− .02	5	19.36
151	BD+ 0° 49	G0	*8.13*	7.66	0 20 10.905	+3.0750	+ .0036	+ .0030	+ 1 6 54.68	+19.968	− .048	− .106	4	18.84
152	CD−29° 106	A0	8.6	7.6	20 18.461	3.0060	− .0130	+ .0036	−29 25 26.92	19.967	.048	.000	4	19.17
153	BD−11° 63	G0	9.5		20 21.574	3.0495	− .0028	.0000	−11 5 25.70	19.966	.048	+ .060	4	18.51
154	BD− 3° 49	K0	6.28	6.52	20 24.393	3.0672	+ .0016	− .0027	− 2 39 41.41	19.966	.048	− .034	4	17.86
155	BD+63° 40	K2	*7.85*	7.81	20 41.78	3.3219	+ .0743	+ .0058	+64 11 44.02	19.964	.052	− .040	4	18.57
156	BD+ 6° 37		9.4		0 20 45.698	+3.0864	+ .0064	+ .001	+ 6 27 24.38	+19.963	− .050	+ .06	4	18.60
157	Brad 23	B9	5.72	5.73	20 46.233	3.2309	+ .0459	+ .0035	+52 36 13.18	19.963	.051	− .003	4	18.56
158	BD−16° 63	K0	8.4	8.26	20 50.920	3.0368	− .0055	− .0010	−16 28 17.75	19.962	.049	+ .011	4	18.80
159	BD+27° 52	K2	*8.56*	8.35	20 59.273	3.1367	+ .0192	+ .0009	+27 38 3.20	19.961	.050	+ .009	4	18.32
160	BD+12° 29		*9.59*		21 10.350	3.1020	+ .0103	+ .001	+13 21 27.62	19.960	.050	+ .01	4	18.74
161	BD+ 8° 45	K0	*9.01*	9.12	0 21 11.575	+3.0914	+ .0076	− .003	+ 8 37 29.67	+19.960	− .050	− .01	4	18.13
162	44 Piscium	G5	5.90	6.1	21 18.046	3.0760	+ .0038	− .0013	+ 1 29 48.57	19.959	.050	− .016	4	17.92
163	BD+22° 61		*9.64*		21 48.763	3.1258	+ .0159	+ .001	+22 40 54.94	19.955	.052	.00	4	18.29
164	BD+ 3° 41	F2	*8.9*	8.60	21 49.668	3.0804	+ .0049	+ .0034	+ 3 28 55.46	19.954	.051	+ .011	5	19.75
165	BD+36° 55	A0	*9.06*	9.3	22 5.276	3.1692	+ .0268	+ .002	+36 52 11.79	19.952	.053	+ .03	4	18.14
166	BD+66° 31		*9.88*		0 22 20.14	+3.3803	+ .0872	+ .0116	+67 5 11.72	+19.950	− .056	+ .060	4	18.52
167	10 Ceti	G5	6.40	6.66	22 31.175	3.0716	+ .0029	+ .0048	− 0 29 33.03	19.949	.052	+ .002	4	18.95
168	BD+23° 60	A3	*9.28*	9.1	22 55.285	3.1308	+ .0165	− .001	+23 31 34.43	19.945	.054	− .02	4	18.65
169	BD+75° 17		*9.10*		23 2.51	3.5988	+ .1592	+ .0067	+75 41 48.32	19.944	.061	− .008	4	18.68
170	BD−15° 70	K2	8.76	9.0	23 8.927	3.0474	− .0044	+ .0006	−14 41 28.77	19.943	.053	+ .005	4	18.51
171	BD+30° 60	G5	8.41	8.60	0 23 10.527	+3.1520	+ .0214	− .0014	+30 27 3.04	+19.943	− .055	− .012	4	18.03
172	CD−23° 159	F2	8.6		23 15.004	3.0148	− .0091	.0000	−23 10 34.33	19.942	.053	+ .008	4	19.32
173	BD+52° 73	F5	*7.56*	8.03	23 31.345	3.2512	+ .0464	− .0128	+52 30 46.71	19.940	.057	− .081	4	18.99
174	BD+ 4° 58		*9.3*		23 31.468	3.0834	+ .0055	+ .0006	+ 4 26 51.02	19.940	.054	+ .016	5	20.10
175	BD+50° 76	F8	*8.72*	9.1	23 32.307	3.2387	+ .0430	− .008	+50 28 16.99	19.940	.057	− .06	4	18.66
176	BD+38° 53		*8.88*	8.7	0 23 42.926	+3.1826	+ .0285	.000	+38 30 51.54	+19.938	− .056	+ .02	4	18.66
177	CD−25° 150	K2	8.4	8.35	23 50.948	3.0058	− .0104	+ .0016	−25 43 29.74	19.937	.054	+ .012	4	18.49
178	Lal 611	Mb	7.54	6.87	23 56.947	3.0128	− .0031	+ .0023	12 6 3.80	19.936	.055	− .020	4	17.96
179	BD+41° 67	G5	8.5	8.83	23 57.448	3.1971	+ .0318	+ .003	+41 44 5.45	19.936	.057	− .03	4	18.64
180	η Sculptoris	Mb	4.96		23 57.836	2.9808	− .0152	− .0022	−33 26 54.74	19.936	.054	− .048	4	18.32

140. 8^m5–9^m5, $0''3$, 72°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
181	Brad 33	K2	6.46	5.90	0 24 3.137	+3.1129	+0.0119	+0.0006	+16 0 10.21	+19.935	−0.056	−0.016	5	20.20
182	Wi (1) 0^h 340	F2	6.02	6.34	24 11.745	3.0969	+ .0081	+ .0015	+ 9 45 6.96	19.933	.056	− .191	[illegible]	18.75
183	Lal 626	G0	6.41	6.58	24 20.492	3.0190	− .0077	− .0098	−20 46 30.14	19.932	.056	− .104	5	18.18
184	BD+32° 69	K0	7.55	7.60	24 22.663	3.1655	+ .0238	+ .003	+33 11 29.23	19.932	.058	.00	[illegible]	17.73
185	BD+47° 113	Ma	7.52	7.10	24 37.132	3.2317	+ .0396	+ .0025	+47 58 17.52	19.930	.059	− .006	5	18.01
186	BD+26° 65	G5	8.6	8.60	0 25 8.998	+3.1455	+ .0187	− .0027	+26 25 46.78	+19.925	− .059	+ .005	4	17.83
187	BD+18° 56		9.4		25 10.505	3.1221	+ .0136	− .002	+18 36 30.48	19.925	.058	− .03	5	19.41
188	BD− 7° 63	G5	9.0	8.83	25 16.896	3.0548	− .0003	+ .001	− 6 57 25.18	19.923	.057	+ .02	4	18.18
189	BD+35° 78		*9.25*	9.3	25 25.508	3.1788	+ .0260	− .004	+35 38 2.09	19.922	.060	− .02	[illegible]	17.94
190	Bo VI+63° 53	A0	7.16	7.21	25 42.78	3.3837	+ .0772	+ .0006	+64 18 25.08	19.919	.063	− .001	4	18.53
191	Brad 35 *br.*	F0	5.26	5.65	0 25 53.800	+3.1573	+ .0208	+ .0030	+29 18 38.57	+19.917	− .059	− .053	4	17.91
192	12 Ceti *br.*	K5	6.04	5.55	25 57.350	3.0611	+ .0010	+ .0005	− 4 23 56.68	19.917	.059	− .007	4	17.94
193	CD−27° 140 *br.*	G0	9.7		25 57.832	2.9934	− .0114	+ .0050	−27 41 14.62	19.917	.058	− .018	4	18.60
194	BD+ 6° 60	G5	*9.73*		26 19.139	3.0909	+ .0069	+ .009	+ 6 46 24.59	19.913	.061	− .04	4	18.04
195	49 G Ceti	A3	5.23	5.51	26 22.768	3.0036	− .0094	− .0026	−24 13 48.78	19.912	.059	+ .016	5	19.46
196	BD− 8° 81	F0	9.0		0 26 25.481	+3.0497	− .0011	− .002	− 8 31 34.57	+19.912	− .060	+ .01	4	18.35
197	BD−19° 68	F8	8.0	8.30	26 35.726	3.0192	− .0065	+ .0130	−19 3 46.42	19.910	.059	+ .004	4	18.22
198	BD+52° 86	K7	*9.55*	9.0	26 39.172	3.2774	+ .0476	− .002	+52 51 9.00	19.910	.064	+ .02	4	18.03
199	BD−17° 70	G0	8.3	8.7	27 15.197	3.0235	− .0055	+ .0016	−17 14 7.07	19.904	.061	− .037	4	18.08
200	BD+10° 57	A5	7.26	7.64	27 21.857	3.1039	+ .0094	− .003	+11 5 29.11	19.903	.062	− .04	4	17.99
201	BD+45° 124	G5	7.57	7.42	0 27 27.090	+3.2351	+ .0366	+ .0025	+45 29 7.45	+19.902	− .065	− .033	4	18.24
202	BD+ 0° 71	K5	*9.38*	9.2	28 5.979	3.0748	+ .0038	+ .0002	+ 0 44 47.59	19.895	.063	− .004	[illegible]	18.02
203	BD+84° 9	G0	*8.67*	8.5	28 15.69	4.7948	+ .6608	+ .0230	+84 32 52.37	19.893	.091	− .013	5	19.67
204	Wi (2) 0^h 645	F0	7.05	6.97	28 26.020	3.2038	+ .0289	− .0019	+38 24 10.28	19.891	.066	− .023	4	18.17
205	κ Cassiopeiæ	B0	4.24	4.24	28 26.39	3.3903	+ .0720	+ .0016	+62 29 25.80	19.891	.070	+ .001	[illegible]	18.33
206	BD+45° 134	A2	*9.14*	8.8	0 28 34.005	+3.2468	+ .0380	− .0047	+46 19 55.79	+19.890	− .067	+ .002	4	18.53
207	Lac 121	K0	6.87	6.27	28 40.349	2.9921	− .0100	.0000	−25 48 0.47	19.888	.063	− .043	[illegible]	18.39
208	BD+ 8° 69	G0	9.1	9.2	28 59.505	3.0978	+ .0079	+ .002	+ 8 28 42.89	19.885	.065	+ .03	[illegible]	18.03
209	BD−10° 99	G5	8.6	8.58	29 4.217	3.0416	− .0018	.0000	−10 25 44.90	19.881	.065	− .042	4	19.06
210	BD+13° 69	F5	7.73	7.36	29 8.490	3.1131	+ .0107	+ .006	+13 23 54.11	19.883	.066	+ .03	4	18.47
211	BD− 1° 60	A3	7.07	7.78	0 29 23.503	+3.0696	+ .0030	.0000	− 1 2 58.45	+19.880	− .065	− .018	4	18.48
212	BD−15° 99		9.5		29 41.212	3.0272	− .0041	+ .0026	−14 46 25.61	19.877	.065	− .020	4	19.01
213	Lac 125	K0	5.62	5.47	29 43.756	2.9729	− .0124	− .0023	−29 59 56.43	19.877	.064	− .028	4	18.40
214	BD+ 2° 67	G5	*8.01*	7.5	29 47.581	3.0814	+ .0050	− .0013	+ 2 52 44.26	19.876	.066	− .017	4	18.69
215	BD+31° 74		*9.09*	9.2	29 52.658	3.1810	+ .0231	+ .0014	+31 56 18.04	19.875	.069	− .009	4	18.77
216	BD+54° 107	A0	*9.22*		0 29 55.024	+3.3166	+ .0516	.000	+54 30 5.29	+19.875	− .071	− .02	4	19.12
217	BD+82° 15		*9.07*		29 55.36	4.4222	+ .4337	+ .0057	+82 39 9.72	19.875	.092	+ .028	4	19.11
218	BD+ 9° 62	G5	6.79	7.1	30 1.862	3.1031	+ .0088	+ .0037	+ 9 51 41.85	19.873	.068	− .163	4	18.02
219	BD− 3° 67	F8	8.8	8.6	30 10.385	3.0640	+ .0021	− .0032	− 2 50 11.88	19.872	.067	− .113	4	18.75
220	BD+20° 66	F5	*8.95*	8.6	30 18.843	3.1401	+ .0153	+ .001	+20 55 55.50	19.870	.069	+ .03	4	19.17
221	BD− 5° 84 *fr.*	G0	10.2		0 30 25.635	+3.0573	+ .0010	+ .0050	− 4 59 1.82	+19.869	− .067	+ .003	4	19.34
222	BD+22° 86	F2	*8.82*	8.98	30 42.926	3.1465	+ .0163	− .002	+22 27 43.51	19.866	.070	− .01	4	18.52
223	BD+58° 77	F8	*8.45*	8.93	30 45.447	3.3688	+ .0619	− .001	+58 52 17.63	19.865	.074	+ .01	5	20.40
224	BD+43° 108		9.0	9.1	30 46.971	3.2456	+ .0353	− .010	+44 1 7.70	19.865	.072	− .05	5	20.44
225	BD+17° 76		*9.53*		30 57.504	3.1303	+ .0134	.000	+17 45 28.69	19.863	.070	− .03	5	20.40
226	BD+71° 25	K5	*8.00*	8.38	0 31 5.31	+3.6308	+ .1279	− .0050	+72 3 31.39	+19.861	− .080	− .015	5	18.42
227	13 Ceti *m.*	G0	5.24	4.97	31 7.765	3.0600	+ .0016	+ .0272	− 4 1 59.12	19.861	.069	− .018	104 87	19.44 19.64
228	BD+24° 83	G5	8.06	7.92	31 11.459	3.1560	+ .0179	+ .0011	+24 39 50.40	19.860	.071	− .053	[illegible]	20.44
229	BD+39° 127	A0	8.6	8.82	31 15.310	3.2252	+ .0308	+ .002	+40 0 35.61	19.859	.072	− .01	4	19.30
230	BD+11° 72 *br.*	G0	*8.42*	8.47	31 19.941	3.1094	+ .0097	− .0076	+11 24 9.02	19.858	.070	− .147	4	18.94
231	BD+47° 144		8.6	8.97	0 31 40.916	+3.2744	+ .0402	+ .009	+47 36 0.07	+19.854	− .074	+ .01	4	18.41
232	BD+ 6° 75	A2	*8.69*	8.82	31 49.203	3.0960	+ .0074	+ .001	+ 7 10 7.48	19.852	.071	.00	4	18.90
233	BD− 6° 97		10.2	8.5	31 59.196	3.0525	+ .0005	.000	− 6 11 59.26	19.850	.070	+ .04	[illegible]	18.68
234	CD−27° 173	F0	8.2	7.9	32 14.424	2.9764	− .0105	.0000	−27 12 3.47	19.847	.070	− .027	[illegible]	19.58
235	BD+61° 131		*9.10*		32 24.06	3.4284	+ .0723	.000	+62 6 9.62	19.845	.079	+ .03	[illegible]	19.84
236	BD+26° 92	F2	8.2	7.33	0 32 29.797	+3.1673	+ .0193	− .0016	+26 36 45.22	+19.844	− .074	− .009	4	18.79
237	ζ Cassiopeiæ	B3	3.72	4.28	32 30.270	3.3276	+ .0501	+ .0023	+53 27 24.80	19.844	.077	− .009	[illegible]	19.98
238	BD+55° 120	K2	*8.60*	8.6	32 31.487	3.3482	+ .0543	+ .003	+55 82 32.67	19.844	.077	.00	[illegible]	19.56
239	CD−29° 171	K0	8.4		32 35.934	2.9664	− .0118	.0000	−29 17 36.86	19.843	.070	− .038	4	19.30
240	π Andromedæ	B3	4.47	5.32	32 36.120	3.1971	+ .0247	+ .0017	+33 16 44.68	19.843	.075	− .009	5	18.69

191. 13^m, $2''.4$, 0°.
192. 11^m, $9''.9$, 194°.

193. 12^m, $1''.6$, 260°.
221. $7^m.0$, 20′, 226°.

227. $5^m.7$–$6^m.5$, $0''.3$, 7 yrs.
230. 13^m, $1''.3$, 146°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
241	Brad 54	B3	5.86	6.03	0 32 37.098	+3.1228	+0.0118	−0.0001	+14 47 29.99	+19.843	−0.074	−0.028	4	18.33
242	BD−18° 99	K2	8.6	8.02	32 43.028	3.0101	− .0056	+ .0018	−18 14 11.09	19.841	.071	− .033	4	18.57
243	BD+42° 119	A0	8.2	8.9	32 52.929	3.2492	+ .0341	− .001	+42 44 2.44	19.839	.076	+ .01	4	18.78
244	82 B Ceti *m.*	K0	5.71	5.92	33 14.096	2.9818	− .0094	+ .1021	−25 12 26.56	19.835	.071	− .009	4	18.51
245	Pi 0h 131	K0	6.58	6.37	33 23.235	3.0818	+ .0051	+ .0069	+ 2 41 47.72	19.833	.076	− .063	4	17.90
246	BD+ 8° 82	K2	9.0	8.94	0 33 29.035	+3.1042	+ .0086	.000	+ 9 12 4.89	+19.832	− .074	.00	5	17.97
247	319 B Cephei	F8	6.40	6.63	33 40.10	4.4738	+ .4073	− .0531	+82 3 8.51	19.829	.104	+ .091	8	18.97
248	BD+ 0° 94	F5	*9.06*	8.7	34 19.077	3.0756	+ .0042	+ .0005	+ 0 50 18.46	19.821	.076	− .031	4	17.64
249	ε Andromedæ	G5	4.52	4.55	34 19.423	3.1827	+ .0212	− .0173	+28 52 39.65	19.821	.078	− .248	5	17.91
250	Grmb 113	K2	5.72	5.60	34 44.130	3.3041	+ .0427	+ .0014	+48 54 54.05	19.815	.081	− .013	4	17.60
251	BD+65° 80	F5	9.00	8.97	0 34 53.42	+3.5161	+ .0869	− .0007	+65 26 22.75	+19.813	− .086	− .019	4	18.32
252	δ Andromedæ	K2	3.49	3.25	35 2.689	3.1922	+ .0224	+ .0107	+30 25 24.31	19.811	.079	− .086	4	17.34
253	BD−14° 105		9.3		35 5.498	3.0230	− .0032	− .0020	−13 41 41.80	19.811	.076	+ .062	4	18.62
254	BD−20° 112	K2	8.8	8.24	35 11.412	2.9962	− .0067	+ .0048	−20 31 39.07	19.809	.075	− .006	5	18.55
255	Brad 58	K0	6.08	5.90	35 11.942	3.1504	+ .0157	− .0330	+20 49 9.44	19.809	.076	− .375	4	18.09
256	BD+69° 32	A0	7.17	7.25	0 35 30.09	+3.6476	+ .1166	+ .0014	+70 16 9.62	+19.805	− .091	− .015	4	18.47
257	BD− 8° 113	K5	8.8	8.28	35 56.582	3.0422	− .0004	− .001	− 8 18 40.58	19.799	.078	+ .01	5	19.34
258	α Cassiopeæ	K0	Var.	2.85	35 57.403	3.3834	+ .0565	+ .0061	+56 5 55.82	19.799	.086	− .031	5	19.42
259	BD+ 6° 87	A3	9.6		36 9.593	3.0995	+ .0077	− .001	+ 7 16 51.33	19.796	.079	.00	5	19.69
260	BD+ 4° 90 *br.*	G	*9.30*		36 11.314	3.0905	+ .0064	+ .0019	+ 4 50 28.59	19.796	.079	− .039	5	17.76
261	BD+35° 121	A3	*9.01*	8.8	0 36 16.688	+3.2263	+ .0275	+ .001	+36 5 25.96	+19.795	− .082	.00	4	18.28
262	Pi 0h 141	G5	6.46	6.37	36 27.814	3.0082	− .0048	+ .0029	−16 57 18.65	19.792	.078	− .029	4	17.84
263	Pi 0h 146	G5	6.12	5.9	36 37.974	3.0549	+ .0015	− .0014	− 4 47 26.70	19.790	.080	− .010	5	17.99
264	BD+11° 80		*8.96*	9.1	36 42.461	3.1174	+ .0102	.000	+11 49 50.44	19.789	.082	.00	4	18.53
265	BD−10° 133	K0	8.9	9.3	36 51.085	3.0334	− .0014	− .0012	−10 23 57.13	19.786	.079	+ .007	4	17.82
266	BD− 2° 91	K0	8.9	8.36	0 37 5.342	+3.0654	+ .0029	+ .0025	− 1 57 26.78	+19.783	− .060	− .126	4	18.77
267	BD+27° 103	A5	8.4	8.00	37 9.817	3.1855	+ .0204	+ .0001	+27 36 14.21	19.782	.083	− .013	5	19.74
268	BD+25° 97	K7	*9.05*	9.15	37 11.004	3.1755	+ .0189	− .0019	+25 27 34.20	19.782	.083	− .029	4	18.52
269	BD− 0° 100	G5	9.63		37 16.399	3.0737	+ .0041	+ .0030	+ 0 16 11.48	19.781	.080	− .013	4	18.56
270	BD+19° 105	F8	*8.09*	8.13	37 28.940	3.1506	+ .0150	+ .0052	+19 41 58.78	19.778	.083	− .074	4	18.04
271	BD+51° 131	K0	*7.89*	7.86	0 37 36.472	+3.3475	+ .0476	+ .006	+51 31 52.09	+19.776	− .089	.00	5	19.55
272	BD+76° 20 *m.*	G5	8.82	9.1	37 38.51	3.9865	+ .2005	− .0120	+76 33 7.30	19.775	.103	+ .014	5	17.53
273	BD+31° 101	B9	*7.82*	7.90	37 46.966	3.2107	+ .0241	.000	+32 10 20.41	19.773	.085	− .03	4	18.35
274	BD+67° 62	K0	*7.90*	7.86	37 49.02	3.6086	+ .1007	− .0009	+67 43 31.41	19.773	.095	+ .011	4	19.13
275	BD+46° 142		8.7	8.72	37 58.198	3.3072	+ .0400	− .001	+46 46 22.31	19.771	.088	− .03	4	19.37
276	BD+55° 142	K5	*8.48*	8.60	0 38 0.876	+3.4006	+ .0570	− .002	+56 3 55.34	+19.770	− .091	− .04	5	18.06
277	BD−12° 121	K0	6.94	7.17	38 12.138	3.0246	− .0022	+ .0046	−12 14 34.33	19.767	.082	− .020	4	17.96
278	BD+39° 163		*9.17*	9.1	38 34.276	3.2586	+ .0313	− .001	+39 42 28.28	19.762	.087	− .01	4	18.14
279	BD+ 3° 94	F8	*9.0*	9.1	38 36.524	3.0858	+ .0057	− .0028	+ 3 21 9.73	19.762	.085	− .035	4	18.74
280	BD+21° 88	F5	9.0	8.6	38 42.739	3.1606	+ .0161	+ .0027	+21 21 23.15	19.760	.086	− .008	5	17.99
281	BD−22° 118	K0	8.2	8.3	0 38 52.096	+2.9811	− .0072	+ .0030	−22 5 48.80	+19.758	− .082	.000	4	19.40
282	CD−27° 212 *br.*	F5	9.5		39 1.025	2.9570	− .0099	.0000	−27 4 1.13	19.755	.082	+ .006	4	19.16
283	BD−16° 122		10.0		39 13.758	3.0053	− .0043	+ .0020	−16 29 43.35	19.752	.083	+ .034	4	20.78
284	BD+24° 104	G5	8.1	8.15	39 26.002	3.1767	+ .0183	− .0003	+24 27 8.28	19.749	.088	− .013	4	17.87
285	Wi (2) 0h 951	A5	7.02	7.15	39 33.734	3.2210	+ .0249	+ .0005	+32 52 20.23	19.747	.089	+ .015	4	18.59
286	β Ceti	K0	2.24	2.62	0 39 34.541	+2.9962	− .0052	+ .0160	−18 25 31.82	+19.747	− .083	+ .039	28 27	22.75 22.97
287	BD+41° 120	A	8.9	8.8	39 36.632	3.2818	+ .0344	− .002	+42 17 37.25	19.747	.091	+ .02	4	18.78
288	BD+53° 131	A0	7.33	7.28	39 51.021	3.3876	+ .0522	+ .003	+53 42 52.36	19.743	.094	+ .03	4	18.43
289	o Cassiopeæ	B2	4.70	4.82	40 15.508	3.3307	+ .0419	+ .0022	+47 50 48.66	19.737	.094	− .005	4	18.53
290	BD−15° 135	F8	9.01	8.9	40 17.538	3.0115	− .0033	− .0020	−14 40 18.73	19.736	.086	− .034	4	18.98
291	21 Cassiopeæ	A2	Var.	5.46	0 40 20.31	+3.9194	+ .1687	− .0053	+74 33 3.59	+19.736	− .109	− .024	8	18.79
292	BD− 6° 124	G5	8.8	8.27	40 26.454	3.0478	+ .0010	+ .004	− 6 3 50.72	19.734	.087	− .03	4	18.48
293	BD+13° 98		*9.33*	9.1	40 36.838	3.1310	+ .0116	.000	+13 53 18.87	19.731	.090	.00	4	18.66
294	BD+15° 109		*9.55*		40 37.301	3.1386	+ .0127	+ .005	+15 37 33.17	19.731	.090	+ .03	5	19.57
295	BD+60° 97		*8.75*	8.9	40 50.77	3.4925	+ .0703	− .006	+60 33 51.30	19.728	.098	+ .03	4	18.85
296	BD− 8° 135		9.8		0 41 26.635	+3.0396	+ .0002	+ .001	− 7 51 9.15	+19.718	− .088	+ .04	5	20.58
297	BD+40° 158	F5	7.67	7.65	41 39.284	3.2781	+ .0324	+ .0078	+40 22 22.36	19.715	.095	− .076	6	20.73
298	BD−18° 122		9.5		41 39.931	2.9927	− .0051	+ .0009	−18 19 45.59	19.715	.087	− .003	4	18.40
299	CD−24° 309	G5	9.30		42 1.115	2.9612	− .0082	− .0069	−24 35 55.41	19.709	.088	− .101	5	20.32
300	Lal 1216	G5	6.49	6.54	42 1.948	3.4805	+ .0660	− .0015	+59 8 15.10	19.709	.101	− .002	4	18.48

244. [illegible] 7, [illegible], 143°, 25 yrs.
258. 2m1 to 2m6.

260. 12m, 2″0, 10

272. 9m3-9m8, 0″6, 198°.

282. 13m, 2″7, 284°.
291. 5m5 to 6m2.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
301	BD−10° 159	K0	8.6	8.4	0 42 28.877	+3.0292	−0.0008	−0.0017	−10 0 38.53	+19.702	−0.090	−0.023	4	18.15
302	CD−29° 219	G5	8.8		42 37.067	2.9358	− .0107	− .0062	−28 59 23.12	19.700	.088	− .050	4	19.32
303	BD+50° 141	K2	*7.72*	7.45	42 53.180	3.3760	+ .0470	− .0025	+50 39 35.42	19.695	.100	− .023	4	18.78
304	BD+77° 25	K0	7.22	6.66	42 57.97	4.2476	+ .2480	+ .0007	+78 1 52.30	19.694	.124	− .037	4	19.10
305	ζ Andromedæ	K0	4.30	4.09	43 5.653	3.1831	+ .0181	− .0074	+23 49 55.91	19.692	.095	− .080	89 34	19.35 18.52
306	BD+45° 202	K0	*8.37*	7.87	0 43 14.485	+3.3305	+ .0394	− .003	+45 48 32.54	+19.690	− .099	− .02	4	19.06
307	BD+68° 54	K0	*8.10*	8.25	43 14.51	3.7291	+ .1139	− .0009	+69 5 58.76	19.690	.111	− .030	4	18.80
308	Brad 80	G5	6.20	6.25	43 15.224	3.1004	+ .0076	+ .0009	+ 6 18 16.15	19.689	.093	− .010	4	19.27
309	BD+36° 126	A5	*9.11*	8.90	43 19.011	3.2633	+ .0292	+ .001	+37 11 40.31	19.688	.097	− .02	4	19.38
310	BD−20° 133	K0	8.6		43 21.293	2.9792	− .0060	+ .0027	−20 24 5.25	19.688	.090	− .015	4	19.62
311	BD+28° 130	K7	*9.68*		0 43 23.794	+3.2096	+ .0215	− .0039	+28 33 8.85	+19.687	− .096	+ .059	4	19.43
312	Lal 1275	K0	7.06	7.03	43 28.143	3.1948	+ .0196	+ .0080	+25 51 17.12	19.686	.096	+ .008	4	19.07
313	BD+34° 116		9.2		43 41.777	3.2462	+ .0266	.000	+34 25 6.51	19.682	.098	.00	4	19.57
314	BD+29° 137	K0	*8.58*	8.73	43 55.338	3.2210	+ .0230	+ .0001	+30 13 46.72	19.678	.098	− .025	4	20.04
315	BD+41° 138		8.9	9.4	43 59.681	3.2984	+ .0340	+ .010	+41 31 7.34	19.677	.100	− .02	4	18.86
316	Lac 218	B9	5.45	5.6	0 44 3.583	+2.9687	− .0069	+ .0009	−22 9 31.96	+19.676	− .091	+ .004	4	19.85
317	147 B Piscium	G5	5.82	5.65	44 11.102	3.0945	+ .0068	+ .0500	+ 4 52 10.19	19.674	.095	−1.144	4	20.11
318	η Cassiopeiæ br.	F8	3.67	3.81	44 15.045	3.4736	+ .0620	+ .1393	+57 23 30.94	19.673	.106	− .523	4	18.83
319	δ Piscium	K5	4.55	4.37	44 31.784	3.1051	+ .0081	+ .0055	+ 7 8 59.70	19.668	.096	− .044	61 39	18.69 18.06
320	BD+53° 149	K5	*9.10*		44 37.818	3.4231	+ .0529	+ .003	+53 34 29.20	19.666	.105	+ .01	4	18.89
321	Brad 86	F5	5.23	5.7	0 44 46.283	+3.1496	+ .0134	− .0014	+16 30 32.54	+19.664	− .098	− .203	4	19.54
322	BD+11° 99		9.4		44 56.305	3.1275	+ .0106	− .001	+11 52 36.96	19.661	.097	+ .01	5	18.76
323	BD+70° 55		*9.15*	9.1	45 10.39	3.8331	+ .1311	+ .0236	+71 0 31.09	19.657	.118	− .068	4	19.01
324	BD− 2° 111	A3	8.8	8.71	45 12.532	3.0633	+ .0033	+ .0009	− 2 3 44.79	19.656	.096	+ .025	4	19.84
325	ν Andromedæ	B3	4.42	4.7	45 23.725	3.2984	+ .0331	+ .0017	+40 38 36.80	19.653	.103	− .021	4	20.49
326	Pi 0ʰ 198 br.	K2	5.84	5.52	0 45 24.488	+3.0071	− .0026	+ .0071	−13 59 41.76	+19.653	− .095	− .087	4	18.69
327	BD+ 5° 109	K2	8.0	7.34	45 31.726	3.1003	+ .0075	− .001	+ 5 58 16.70	19.651	.098	+ .02	4	18.77
328	BD− 3° 105	G5	9.5		45 32.562	3.0567	+ .0027	− .0034	− 3 27 56.49	19.651	.097	− .048	4	18.86
329	BD−11° 149	K0	8.2	7.59	45 32.912	3.0195	− .0013	+ .0021	−11 23 50.73	19.651	.096	− .006	4	19.55
330	BD+61° 175		*8.95*		45 47.31	3.5701	+ .0768	.000	+61 55 49.79	19.646	.112	− .01	4	19.41
331	Wi (1) 0ʰ 732	K0	6.80	6.56	0 45 49.076	+3.0697	+ .0041	+ .0017	− 0 39 34.96	+19.646	− .097	− .001	5	20.55
332	Pi 0ʰ 196	A0	6.12	6.28	45 49.792	3.3342	+ .0380	+ .0065	+44 33 59.43	19.646	.105	− .003	4	20.04
333	Brad 82	*	5.45	5.56	45 51.41	3.6128	+ .0846	+ .0047	+63 48 44.02	19.645	.113	.000	4	20.52
334	BD+49° 215	F5	8.02	7.40	45 52.470	3.3916	+ .0467	− .005	+50 11 41.72	19.645	.107	− .01	4	19.55
335	BD+23° 115	K0	*9.48*		45 53.420	3.1884	+ .0181	− .001	+23 31 19.75	19.645	.098	+ .01	4	19.58
336	BD+48° 250		8.2	8.72	0 46 1.290	+3.3735	+ .0437	− .006	+48 27 11.44	+19.642	− .107	− .02	4	19.78
337	19 Ceti	F5	5.24	5.4	46 7.245	3.0204	− .0011	− .0160	−11 4 29.86	19.641	.097	− .225	5	19.06
338	BD+84° 14	K0	8.33	8.50	46 13.08	6.307	+1.102	− .002	+85 16 6.17	19.639	.192	+ .010	4	19.42
339	BD−16° 142	K0	8.2	7.78	46 16.913	2.9943	− .0037	+ .0016	−16 18 51.45	19.638	.096	− .004	5	20.17
340	CD−24° 358	G0	8.6	8.39	46 48.630	2.9514	− .0075	+ .0063	−24 6 17.87	19.629	.096	− .084	4	18.69
341	BD+32° 149	F5	*8.25*	8.32	0 46 49.480	+3.2496	+ .0256	+ .001	+33 7 19.83	+19.628	− .105	+ .04	4	19.56
342	BD+ 7° 120	K5	9.4	8.77	46 51.888	3.1104	+ .0086	− .002	+ 7 54 4.27	19.628	.101	− .01	5	20.51
343	BD+37° 153		*9.47*		47 7.706	3.2833	+ .0301	+ .003	+37 39 29.18	19.623	.106	− .01	4	19.39
344	BD− 5° 139	F8	8.8	8.6	47 8.549	3.0459	+ .0016	+ .006	− 5 37 5.07	19.623	.099	+ .01	5	18.56
345	BD+ 1° 150		9.4		47 21.188	3.0797	+ .0052	+ .0052	+ 1 28 8.43	19.619	.100	− .024	4	19.31
346	BD+ 3° 113		*9.31*		0 47 29.948	+3.0899	+ .0064	− .0026	+ 3 35 15.02	+19.616	− .101	− .013	4	19.04
347	BD+15° 126	G5	*7.96*	7.93	47 38.374	3.1533	+ .0135	.000	+16 16 52.75	19.614	.103	.00	4	19.12
348	BD+65° 103	A2	8.33	7.6	47 38.59	3.6767	+ .0934	+ .0054	+65 27 25.41	19.614	.119	− .008	4	18.71
349	BD− 7° 130	K5	8.9	8.23	47 51.801	3.0359	+ .0007	.000	− 7 33 35.18	19.610	.100	+ .04	5	17.20
350	BD+ 9° 99 m.	F8	8.4	8.54	47 57.186	3.1225	+ .0099	+ .003	+10 9 59.57	19.608	.103	+ .01	4	19.34
351	BD+ 9° 99 s.	F8	8.8	8.4	0 47 57.224	+3 1225	+ .0099	+ .003	+10 10 0.94	+19.608	− .103	+ .01	4	17.98
352	BD+63° 105 br.	F0	*8.10*	8.04	48 5.04	3.6307	+ .0841	+ .001	+63 29 26.03	19.606	.119	− .02	4	18.75
353	BD+51° 172	A0	*8.42*	8.28	48 5.540	3.4329	+ .0510	− .001	+52 17 56.32	19.605	.112	− .02	4	18.78
354	BD+40° 184		*8.47*	8.06	48 17.913	3.3115	+ .0332	− .001	+40 30 21.73	19.602	.109	− .04	6	20.83
355	BD+29° 145	K2	*8.32*	8.02	48 22.247	3.2355	+ .0233	+ .0019	+30 10 14.22	19.600	.107	− .011	4	17.98
356	BD+18° 114	K2	*8.49*	8.26	0 48 32.666	+3.1669	+ .0148	− .0018	+18 31 44.02	+19.597	− .105	− .030	4	18.09
357	20 Ceti	K0	4.92	4.56	48 55.098	3.0649	+ .0037	− .0004	− 1 34 42.14	19.590	.103	− .016	4	18.01
358	Wi (2) 0ʰ 1172	K0	6.13	6.12	49 4.192	3.2866	+ .0295	.0000	+36 59 5.66	19.587	.110	− .065	4	17.94
359	BD+79° 21		*9.25*		49 5.95	4.7222	+ .3550	+ .0077	+80 13 37.42	19.587	.155	− .032	5	19.01
360	BD+21° 114		*9.17*	9.1	49 38.065	3.1858	+ .0168	.000	+21 29 53.65	19.577	.108	+ .01	4	18.19

318. $7^{m}41$, $7''4$, 258°; 59 yrs.; for c. g. add $-^{s}365$, $-''71$ (1918.83); p. m. is for c. g.
326. 12^{m}, $1''3$, 117°.
333. F2, A2.
350. $8^{m}8$–$9^{m}5$, $1''0$, 2°.
351. $9^{m}5$, $1''0$, 2°.
352. 13^{m}, $3''3$, 187°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
361	BD+67° 77		*9.20*		0 49 44.13	+3.7665	+0.1064	+0.0061	+67 28 28.92	+19.575	−0.127	−0.006	4	18.51
362	BD−10° 183	K0	8.81	8.7	49 58.212	3.0230	− .0004	+ .0086	− 9 45 24.68	19.571	.103	+ .011	4	18.55
363	BD+24° 136	F0	8.61	8.3	50 6.525	3.2096	+ .0197	.0000	+25 16 53.93	19.568	.110	− .036	4	18.49
364	BD+ 7° 131		*9.54*		50 31.206	3.1145	+ .0089	− .002	+ 8 8 19.56	19.560	.108	+ .03	5 4	19.63 18.56
365	BD−22° 155	F5	7.8	8.4	50 43.290	2.9547	− .0062	+ .0023	−21 54 23.96	19.556	.103	− .002	4	18.43
366	BD+35° 167		*8.68*	8.58	0 50 53.478	+3.2836	+ .0283	+ .001	+35 37 6.49	+19.553	− .114	+ .02	5	18.08
367	BD+49° 239		8.2	7.80	51 3.908	3.4183	+ .0463	+ .001	+49 29 44.20	19.550	.118	− .05	4	17.83
368	BD+69° 54	A2	*8.15*	8.55	51 22.04	3.8897	+ .1270	+ .0029	+70 1 13.58	19.544	.134	+ .008	4	18.32
369	BD−13° 155	F5	7.8	7.77	51 29.632	3.0040	− .0017	+ .0060	−12 59 10.35	19.541	.106	+ .012	4	18.48
370	BD+19° 146		*9.38*	8.8	51 33.160	3.1788	+ .0157	.000	+19 35 4.38	19.540	.112	− .06	4	18.78
371	BD+63° 116	A2	*8.92*	8.76	0 51 39.53	+3.6945	+ .0896	+ .0031	+64 20 36.89	+19.538	−.129	− .012	4	18.54
372	CD−26° 297	K0	9.2		51 48.906	2.9239	− .0083	+ .0018	−26 24 53.10	19.536	.104	− .029	5	20.53
373	BD−18° 152	K0	8.4	8.21	51 51.854	2.9768	− .0040	− .0007	−17 44 30.31	19.534	.106	− .014	5	20.50
374	γ Cassiopeiæ *br.*	B0	2.25	2.8	51 52.00	3.5981	+ .0729	+ .0040	+60 17 1.85	19.534	.126	− .002	4	17.98
375	Wi (1) 0^{h}839	G5	6.83	6.54	51 57.142	3.1449	+ .0120	+ .0004	+13 31 8.27	19.532	.112	+ .005	5	19.30
376	Lac 256	Ma	6.20	5.94	0 52 2.830	+2.9113	− .0093	+ .0010	−28 12 32.49	+19.531	− .104	− .005	5	20.52
377	BD+29° 155	K0	*9.3*		52 6.828	3.2455	+ .0231	− .0010	+29 49 57.23	19.529	.115	− .001	4	19.34
378	μ Andromedæ	A2	3.94	3.9	52 18.353	3.3095	+ .0309	+ .0128	+38 3 56.68	19.525	.118	+ .027	4	18.78
379	BD−20° 167	A0	7.93	7.28	52 33.244	2.9629	− .0050	+ .0031	−19 52 37.67	19.520	.107	− .016	4	19.04
380	BD− 0° 146	G5	7.71	7.76	53 7.110	3.0722	+ .0048	− .0008	− 0 5 24.54	19.509	.111	− .020	4	18.10
381	BD+11° 120	K2	8.33	8.06	0 53 10.160	+3.1380	+ .0112	− .001	+11 59 51.11	+19.508	− .113	.00	4	19.22
382	*h* Piscium	K0	5.64	5.38	53 30.096	3.2410	+ .0221	+ .0009	+28 33 36.00	19.501	.118	− .012	4	19.70
383	BD+43° 187	A2	8.4	8.40	53 32.655	3.3656	+ .0375	+ .004	+43 25 36.70	19.501	.122	− .04	4	18.56
384	Wi (1) 0^{h}870	G5	7.29	6.81	53 32.992	3.0800	+ .0055	.0000	+ 1 21 10.32	19.501	.112	+ .004	4	18.24
385	BD−12° 168		10.4		53 44.534	3.0078	− .0012	− .0022	−11 48 55.90	19.497	.110	− .048	4	19.16
386	BD+39° 221		9.2	8.4	0 53 47.330	+3.3285	+ .0326	+ .003	+39 27 35.20	+19.496	− .121	− .02	4	19.09
387	BD+46° 214		8.7	9.3	53 53.769	3.4020	+ .0419	+ .004	+46 35 54.97	19.495	.124	− .02	5	20.16
388	BD− 1° 122		9.0	9.5	53 54.864	3.0663	+ .0042	− .0010	− 1 10 47.67	19.493	.113	− .011	5	18.89
389	BD+73° 47	K0	*7.80*	8.42	53 55.05	4.1281	+ .1703	− .0071	+73 33 20.98	19.493	.149	+ .004	4	18.55
390	BD+72° 53	A2	*8.95*	9.20	53 59.01	4.0548	+ .1543	+ .0037	+72 22 53.92	19.492	.146	+ .057	4	18.49
391	Pi 0^{h} 245 *m.*	A0	6.41	6.58	0 54 3.005	+3.1924	+ .0168	− .0010	+20 58 20.43	+19.490	− .117	− .009	4	18.88
392	CD−23° 367	K5	8.0	7.80	54 5.457	2.9400	− .0064	+ .0023	−23 1 39.12	19.490	.109	− .021	4	18.82
393	BD− 3° 135	K0	8.8	8.46	54 7.769	3.0563	+ .0033	+ .0025	− 3 0 23.19	19.489	.113	.000	4 5	19.63 18.85
394	BD+56° 163^{a}	G5	*9.13*		54 9.106	3.5473	+ .0623	+ .001	+56 36 28.99	19.488	.129	+ .01	4	19.44
395	Wi (1) 0^{h} 890	K0	6.70	7.02	54 42.595	3.0378	+ .0017	− .0004	− 6 18 46.32	19.477	.114	− .080	4	18.46
396	α Sculptoris	B5	4.39	4.62	0 54 45.160	+2.8917	− .0097	+ .0006	−29 47 22.43	+19.476	− .108	+ .001	5	18.67
397	BD+16° 96	F0	*9.23*	8.9	54 47.297	3.1663	+ .0139	.000	+16 28 31.98	19.475	.118	− .02	4	18.20
398	BD+27° 157	G0	*9.48*		54 49.841	3.2368	+ .0214	+ .0019	+27 23 31.75	19.474	.120	− .088	4	19.62
399	BD−15° 179	F5	9.8		54 52.535	2.9843	− .0029	+ .0010	−15 35 21.82	19.473	.111	+ .013	4	18.55
400	BD+53° 196	G5	*8.85*	8.91	54 59.972	3.5155	+ .0568	− .004	+54 20 48.16	19.471	.130	− .11	4	19.30
401	BD+24° 155	K2	*8.57*	8.71	0 55 2.634	+3.2187	+ .0195	+ .0006	+24 39 58.51	+19.470	− .120	− .013	4	19.17
402	BD+31° 158	G5	*7.67*	7.75	55 35.815	3.2688	+ .0246	− .0012	+31 25 23.07	19.458	.123	− .036	4	18.02
403	BD− 9° 197	F8	9.2		56 7.006	3.0199	+ .0004	+ .001	− 9 15 40.86	19.447	.115	+ .01	4	18.51
404	BD+22° 161	G5	*8.90*	9.5	56 12.377	3.2122	+ .0185	− .002	+23 15 39.44	19.445	.123	− .01	4	18.47
405	Lal 1676 *m.*	B9	6.67	6.84	56 13.16	3.9150	+ .1209	− .0026	+68 55 40.30	19.445	.147	+ .031	12	19.24
406	BD+50° 198	B5	7.67	7.30	0 56 17.473	+3.4662	+ .0488	+ .0057	+50 26 53.70	+19.444	− .131	+ .001	4	18.96
407	BD+14° 152	G0	9.4	8.6	56 27.453	3.1564	+ .0127	+ .016	+14 24 37.27	19.440	.121	− .03	4	19.41
408	BD+41° 185		*9.10*	9.2	56 29.060	3.3599	+ .0350	− .004	+41 22 25.06	19.439	.128	− .01	4	19.28
409	BD+ 7° 144	G5	9.6	9.42	56 33.079	3.1202	+ .0093	− .002	+ 8 16 15.64	19.438	.119	.00	4	18.26
410	CD−26° 326	G5	7.40	6.98	56 40.395	2.9119	− .0077	+ .0049	−26 10 44.72	19.435	.112	− .055	6	19.64
411	BD+56° 175	K5	*8.38*	8.6	0 56 57.867	+3.5855	+ .0649	− .003	+57 20 3.66	+19.429	− .136	− .01	4	19.01
412	BD+ 2° 143	K2	*9.03*	8.6	57 2.561	3.0900	+ .0065	− .0004	+ 2 59 57.53	19.427	.119	− .018	5	[illegible]
413	BD+10° 115	G5	8.18	8.30	57 2.728	3.1352	+ .0107	− .002	+10 45 1.48	19.427	.121	+ .02	5	18.66
414	BD+48° 321		9.2		57 22.318	3.4477	+ .0457	+ .001	+48 33 31.46	19.420	.133	.00	4	19.30
415	BD− 7° 150	K2	7.26	7.30	57 31.648	3.0306	+ .0015	+ .002	− 7 13 48.33	19.417	.118	.00	4	19.57
416	43 H Cephei	K0	4.52		0 57 32.32	+7.625	+1.560	+ .079	+85 49 43.21	+19.417	− .285	− .006	120 95	19.71 19.06
417	Lal 1787	G5	6.58	6.56	57 40.474	2.9720	− .0031	+ .0050	−16 41 38.31	19.414	.116	− .066	4	19.09
418	BD−20° 183	G0	8.2	8.10	57 50.466	2.9523	− .0046	+ .0115	−19 50 46.05	19.410	.116	− .168	4	19.54
419	BD+44° 219		*9.48*		57 56.222	3.4041	+ .0397	.000	+44 45 1.90	19.408	.132	.00	4	19.42
420	BD+66° 90	F8	*9.00*	8.9	58 23.19	3.8465	+ .1045	− .0067	+66 28 46.04	19.398	.150	+ .012	4	19.40

374. $11^{m}0$, $2''1$, 253°.

391. $6^{m}7$-$8^{m}1$, $0''6$, 116°.

405. $7^{m}6$-$7^{m}6$, $0''2$, 10°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
421	BD+33° 155		*9.64*		0 58 23.822	+ 3.2971	+ 0.0270	−0.001	+33 40 26.28	+19.398	−0.130	−0.04	4	18.98
422	σ Sculptoris	A2	5.52	5.8	58 37.332	2.8616	− .0104	+ .0061	−31 58 57.18	19.393	.116	+ .008	4	19.95
423	ε Piscium	K0	4.45	4.27	58 47.346	3.1171	+ .0090	− .0054	+ 7 27 34.98	19.389	.124	+ .028	83 67	19.66 19.56
424	BD+15° 154	K0	8.58	8.64	58 47.784	3.1681	+ .0136	.0000	+15 42 26.26	19.389	.126	− .130	5	20.43
425	BD−11° 193		10.0		58 47.944	3.0070	− .0003	.0000	−10 57 50.48	19.389	.120	− .027	4	18.64
426	Lal 1809	K2	6.27	5.73	0 59 19.703	+ 3.5117	+ .0526	+ .0017	+52 4 27.05	+19.377	− .139	− .072	4	19.01
427	BD+36° 187		*7.87*	7.80	59 33.017	3.3259	+ .0298	+ .001	+36 24 14.91	19.372	.133	− .02	4	19.38
428	BD+79° 26		*8.68*	8.3	59 37.26	4.9569	+ .3562	+ .0093	+79 39 40.12	19.371	.194	+ .031	4	18.30
429	BD+ 5° 141	A0	6.89	7.22	59 37.869	3.1109	+ .0084	.000	+ 6 20 8.82	19.370	.125	.00	4	18.24
430	26 Ceti	F0	6.18	6.13	0 59 41.889	3.0783	+ .0056	+ .0079	+ 0 56 17.55	19.369	.123	− .034	4	19.72
431	Lal 1854	F5	6.08	5.90	1 0 4.959	+ 3.2665	+ .0232	+ .0083	+29 13 55.83	+19.360	− .131	− .133	4	19.18
432	BD+18° 142	G5	*8.88*	8.59	0 14.253	3.1919	+ .0157	+ .0023	+18 56 54.11	19.357	.130	+ .010	4	18.35
433	CD−27° 345	A2	9.5		0 27.183	2.8907	− .0081	− .0002	−27 35 2.96	19.352	.118	+ .004	4	19.00
434	BD− 4° 139		9.5		0 31.406	3.0509	+ .0033	− .0002	− 3 39 26.33	19.350	.124	− .021	4	18.46
435	72 Piscium	F2	5.65	5.8	0 51.803	3.1635	+ .0130	− .0002	+14 30 58.57	19.343	.130	+ .044	4	19.20
436	1 B Urs Min	A2	6.48	6.68	1 1 6.88	+17.433	+12.157	+ .196	+88 35 42.96	+19.337	− .675	− .018	8	19.76
437	BD+67° 96		*9.12*		1 20.36	3.9558	+ .1181	− .0068	+68 11 17.16	19.332	.161	+ .003	4	18.34
438	BD+ 9° 125		*9.57*		1 23.614	3.1358	+ .0106	+ .001	+10 6 28.66	19.330	.128	− .08	4	18.53
439	BD−13° 196	G0	7.62	7.47	1 26.003	2.9888	− .0013	+ .0080	−13 19 58.65	19.329	.124	+ .047	4	19.14
440	BD+61° 208	K0	*7.83*	7.91	1 30.51	3.7460	+ .0836	+ .0060	+62 14 33.91	19.328	.153	− .016	4	18.85
441	BD+16° 111	F5	*8.97*	8.4	1 1 54.510	+ 3.1838	+ .0148	+ .003	+17 18 23.11	+19.318	− .132	+ .04	5	18.01
442	BD−22° 193	A5	8.5	8.52	1 56.975	2.9286	− .0053	.0000	−21 59 43.51	19.317	.122	+ .038	5	20.18
443	BD+59° 181	A0	6.78	6.89	1 57.460	3.6769	+ .0729	+ .0025	+59 25 51.69	19.317	.151	.000	4	18.65
444	CD−26° 357	F0	8.2		2 0.432	2.8992	− .0072	+ .0073	−25 54 37.93	19.316	.121	+ .068	4	19.41
445	BD+76° 34		*9.32*	9.3	2 3.51	4.6230	+ .2552	+ .0029	+77 0 56.80	19.315	.190	+ .022	4	18.37
446	BD+22° 173		*9.48*		1 2 5.014	+ 3.2246	+ .0186	− .001	+23 1 13.60	+19.314	− .134	− .01	4	19.17
447	Lal 1947	G5	6.29	6.17	2 15.328	2.9099	− .0064	− .0019	−24 25 11.10	19.310	.122	− .035	4	19.40
448	BD+12° 135	G5	6.22	6.41	2 20.919	3.1525	+ .0119	+ .0010	+12 31 38.86	19.308	.132	+ .037	4	18.56
449	BD+39° 257		*9.55*		2 30.877	3.3784	+ .0344	+ .0083	+40 20 22.50	19.304	.141	− .069	5	18.49
450	BD+47° 312	F5	7.6	7.97	2 44.394	3.4687	+ .0447	+ .002	+47 37 35.85	19.299	.145	+ .02	4	18.96
451	μ Cassiopeiæ	G5	5.26	5.16	1 2 55.500	+ 3.5812	+ .0587	+ .3930	+54 31 44.73	+19.294	− .150	−1.562	5	18.34
452	BD+26° 185	K0	*8.91*	9.5	3 9.687	3.2569	+ .0215	− .0017	+26 51 29.37	19.289	.137	− .027	4	18.52
453	BD+ 4° 186	F5	*8.81*	9.2	3 20.709	3.1031	+ .0077	+ .0027	+ 4 45 49.43	19.284	.131	− .009	4	18.92
454	BD− 1° 149	F8	9.6		3 28.746	3.0628	+ .0045	− .0013	− 1 32 54.56	19.281	.130	− .035	5	20.57
455	BD+42° 240	A0	7.65	7.68	3 32.123	3.4069	+ .0371	+ .005	+42 25 14.76	19.280	.144	+ .02	4	19.35
456	Brad 131	F2	6.29	6.02	1 3 35.366	+ 3.2978	+ .0254	+ .0153	+31 35 8.23	+19.279	− .140	− .047	4	18.51
457	Brad 132	A2	5.63	5.78	3 39.430	3.2084	+ .0168	+ .0060	+20 18 50.78	19.277	.136	− .092	4	18.55
458	BD− 5° 192	K0	8.3	7.77	3 40.972	3.0395	+ .0028	+ .0046	− 5 10 18.38	19.276	.129	− .023	4	18.65
459	Brad 135	F2	5.87	6.0	3 44.813	3.0066	+ .0003	+ .0097	−10 12 47.61	19.275	.128	+ .022	4	19.32
460	BD+70° 81		*8.90*		4 9.28	4.1143	+ .1407	+ .0036	+70 28 54.22	19.265	.174	+ .022	4	19.01
461	Wi (1) 0h 1075	Ma	6.90	6.62	1 4 10.739	+ 3.1344	+ .0103	− .0001	+ 9 28 52.34	+19.264	− .134	+ .011	4	19.53
462	e Piscium	F0	5.67	5.84	4 14.772	3.1065	+ .0080	− .0182	+ 5 13 36.49	19.263	.134	− .181	4	20.26
463	BD+53° 231	K2	*8.50*	8.75	4 18.093	3.5769	+ .0571	+ .008	+53 43 17.08	19.261	.153	− .02	5	18.28
464	BD+57° 203	F5	*8.32*	8.06	4 19.660	3.6648	+ .0687	+ .0022	+57 59 13.33	19.261	.155	− .055	4	18.93
465	BD−15° 206	K0	9.0	8.2	4 27.342	2.9691	− .0021	+ .002	−15 36 17.69	19.258	.128	+ .01	4	19.77
466	BD−19° 186	G5	8.78	8.6	1 4 30.514	+ 2.9406	− .0040	+ .0018	−19 35 35.57	+19.256	− .127	− .057	5	20.69
467	η Ceti	K0	3.60	4.19	4 33.873	3.0031	+ .0002	+ .0141	−10 36 21.60	19.255	.130	− .133	4	17.88
468	BD−17° 198	Ma	8.7	7.7	4 42.529	2.9554	− .0029	+ .0006	−17 29 24.74	19.251	.128	+ .011	4	18.09
[illegible]	BD+ 7° 176	K5	9.4		5 0.738	3.1244	+ .0094	− .002	+ 7 52 10.52	19.244	.136	+ .01	4	18.41
470	BD+21° 156	A3	*8.47*	8.48	5 5.308	3.2251	+ .0182	+ .002	+22 9 5.22	19.242	.140	− .01	4	18.36
471	β Andromedæ	Ma	2.37	2.62	1 5 14.765	+ 3.3374	+ .0290	+ .0149	+35 11 48.46	+19.238	− .145	− .115	19	20.11
472	44 H Cephei	A0	5.68	6.03	5 18.18	5.0511	+ .3497	+ .0328	+79 14 55.00	19.237	.215	+ .008	8	18.68
473	BD+ 2° 164		*9.5*		6 6.503	3.0898	+ .0067	+ .0026	+ 2 34 28.08	19.217	.136	− .061	4	18.23
474	BD− 9° 227	G5	6.58	6.11	6 11.191	3.0102	+ .0009	− .0008	− 9 19 52.14	19.215	.133	− .037	4	17.84
475	Brad 139	B8	5.49	5.71	6 27.77	3.8773	+ .0969	+ .0035	+64 35 37.67	19.208	.170	− .015	4	18.21
476	BD+16° 121		*9.57*	9.5	1 6 31.418	+ 3.1861	+ .0145	− .001	+16 30 54.91	+19.207	− .141	+ .05	5	19.24
477	Oelt 1188	K5	6.86	6.82	6 31.982	3.4655	+ .0422	− .0001	+45 45 32.08	19.206	.152	− .001	4	18.12
478	BD+36° 201	B8	5.75	5.83	6 40.146	3.3647	+ .0312	− .0018	+37 17 55.87	19.203	.149	− .003	4	18.14
479	BD+30° 181	A5	5.04	5.17	6 41.741	3.3031	+ .0251	− .0017	+30 59 58.72	19.202	.147	− .014	4	18.21
480	BD+ 8° 183	G0	7.15	7.40	6 42.652	3.1344	+ .0102	+ .0060	+ 9 7 58.85	19.202	.140	+ .251	5	17.92

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
481	CD−28° 359	F0	8.7	8.5	1 6 43.591	+2.8670	−0.0078	+0.0016	−28 12 16.98	+19.202	−0.128	−0.007	4	18.85
482	χ Piscium	K0	4.89	4.75	7 8.996	3.2179	+ .0172	+ .0014	+20 36 34.66	19.191	.144	+ .006	4	19.29
483	τ Piscium	K0	4.70	4.8	7 14.896	3.2929	+ .0239	+ .0055	+29 39 55.02	19.188	.146	− .038	4	17.72
484	BD−21° 185		9.9		7 37.455	2.9246	− .0043	+ .0031	−20 51 26.35	19.179	.132	+ .005	4	18.55
485	CD−30° 373		8.9		7 38.382	2.8491	− .0085	− .0008	−29 54 59.12	19.178	.129	− .016	5	18.45
486	BD+14° 185	F5	*9.51*		1 8 1.394	+3.1762	+ .0135	+ .003	+14 49 58.94	+19.169	− .144	+ .01	4	18.09
487	BD+71° 59	A0	8.62		8 26.61	4.2879	+ .1631	− .0026	+72 4 16.19	19.158	.192	− .013	4	18.26
488	BD+49° 325		*9.60*		8 29.731	3.5378	+ .0493	+ .003	+49 46 4.07	19.157	.160	− .04	4	18.72
489	BD+ 5° 158		9.1	8.6	8 35.951	3.1166	+ .0088	+ .002	+ 6 21 8.14	19.154	.142	.00	4	18.40
490	Brad 156	G5	6.93	6.72	8 46.075	3.0228	+ .0020	− .0038	− 7 12 26.38	19.150	.138	− .019	4	18.50
491	CD−25° 480	K5	8.5		1 8 54.964	+2.8826	− .0064	+ .0080	−25 39 37.83	+19.146	− .132	+ .012	4	19.31
492	BD+64° 133		*8.18*	9.2	9 6.82	3.9362	+ .1020	+ .0008	+65 18 50.04	19.141	.179	− .001	5 6	17.12 17.10
493	BD+32° 207		*8.51*	8.02	9 8.307	3.3312	+ .0272	.000	+33 4 0.46	19.140	.153	− .01	4	18.42
494	BD+55° 271	K5	*7.80*	8.06	9 12.596	3.6529	+ .0626	+ .008	+55 35 21.37	19.138	.167	.00	4	18.24
495	BD+39° 287		*9.22*		9 24.507	3.4039	+ .0341	+ .001	+39 43 32.71	19.133	.157	− .01	4	18.11
496	BD+60° 192		*8.85*		1 9 25.62	+3.7764	+ .0786	− .001	+60 28 4.01	+19.132	− .173	+ .02	4	19.00
497	ζ^{1} Piscium *s. pr.*	A5	5.57	5.29	9 32.963	3.1228	+ .0093	+ .0089	+ 7 9 9.61	19.129	.144	− .052	4	18.84
498	BD+ 4° 212	F8	*7.98*	7.82	9 42.530	3.1057	+ .0080	+ .0033	+ 4 43 6.46	19.125	.144	− .019	5	19.34
499	BD−12° 226	F5	8.7	8.79	9 42.664	2.9850	− .0003	+ .0098	−12 21 16.48	19.125	.139	+ .092	5	20.15
500	BD− 2° 184	F5	8.7	8.02	10 0.058	3.0549	+ .0043	+ .0021	− 2 32 16.52	19.117	.142	− .007	5	20.39
501	BD+18° 163	G5	*8.03*	8.06	1 10 7.413	+3.2090	+ .0160	+ .001	+18 42 13.00	+19.114	− .149	.00	4	17.87
502	BD+27° 199 *m.*	G0	*9.31*	8.8	10 13.832	3.2840	+ .0225	− .0001	+27 39 6.57	19.111	.153	− .011	4	18.31
503	37 Ceti	F0	5.21	5.36	10 22.204	3.0134	+ .0016	+ .0084	− 8 21 8.65	19.108	.141	+ .268	5	20.96
504	BD− 5° 215	F8	7.46	7.0	10 27.342	3.0340	+ .0030	− .0110	− 5 28 3.23	19.105	.142	− .130	4	18.04
505	BD+ 2° 175	K0	*9.0*		10 38.786	3.0897	+ .0068	+ .0001	+ 2 23 54.91	19.100	.146	− .001	4	17.97
506	Brad 165	F5	5.82	5.66	1 10 44.070	+3.0628	+ .0049	− .0017	− 1 24 6.04	+19.098	− .143	+ .219	5	19.25
507	BD+12° 152		9.8	9.3	10 50.771	3.1639	+ .0123	.000	+12 38 33.93	19.095	.149	+ .03	4	18.49
508	BD+33° 195	G5	*7.84*	7.23	11 12.459	3.3515	+ .0284	− .004	+34 18 13.44	19.085	.157	− .03	4	18.30
509	CD−23° 461	G0	8.26	8.2	11 16.152	2.8964	− .0051	+ .0036	−23 19 21.37	19.084	.138	.000	4	17.71
510	BD+48° 383		9.2	9.3	11 27.143	3.5477	+ .0486	+ .003	+49 12 20.95	19.079	.167	− .03	4	18.57
511	BD+77° 46	G0	*8.46*	8.7	1 11 32.84	+5.0413	+ .3155	+ .0131	+78 13 21.69	+19.076	− .234	− .013	4	18.46
512	BD+15° 181	A2	7.64	7.61	11 40.128	3.1888	+ .0143	+ .003	+15 46 4.70	19.073	.151	− .03	4	18.01
513	BD+25° 205	Na	Var.	6.8	11 42.954	3.2676	+ .0207	− .0021	+25 20 48.77	19.072	.154	− .003	4	18.15
514	BD+61° 237	K0	*8.28*	8.59	12 3.35	3.8462	+ .0853	+ .001	+61 53 9.59	19.062	.182	.00	4	18.96
515	BD+74° 58	G0	*8.52*	8.53	12 13.31	4.5742	+ .2086	+ .0042	+74 34 40.52	19.058	.215	− .033	4	18.53
516	BD−15° 236		10.3		1 12 23.123	+2.9625	− .0013	+ .0039	−14 52 20.60	+19.053	− .143	− .027	4	18.58
517	BD+33° 199		*9.45*	8.9	12 41.098	3.3491	+ .0277	+ .001	+33 32 54.01	19.045	.161	− .11	5	18.41
518	Wi (2) 1^{h} 162	B9	6.55	6.73	12 42.678	3.4110	+ .0337	− .0013	+39 3 31.90	19.044	.164	.000	6	18.40
519	BD+54° 257	A7	*8.60*	8.8	12 42.781	3.6580	+ .0605	+ .001	+54 32 9.90	19.044	.175	− .01	4	18.33
520	BD+20° 187	G5	9.1	9.11	12 43.454	3.2280	+ .0173	+ .001	+20 25 27.36	19.044	.155	− .01	4	18.78
521	BD+ 7° 193		9.6		1 12 47.513	+3.1294	+ .0097	− .001	+ 7 43 59.67	+19.042	− .151	.00	4	18.52
522	BD−17° 227	G0	9.1	8.2	12 48.420	2.9440	− .0022	+ .0010	−17 7 53.88	19.042	.142	− .077	5	20.57
523	Grmb 282	K5	7.25	6.78	13 1.986	3.4800	+ .0405	− .0005	+44 12 37.74	19.036	.167	− .003	5 4	19.97 18.96
524	BD+46° 318 *m.*	A3	8.6	8.93	13 24.786	3.5192	+ .0443	.000	+46 41 45.42	19.025	.170	+ .02	4	19.11
525	BD+11° 163		*9.67*		13 24.934	3.1583	+ .0118	− .005	+11 29 40.06	19.025	.152	− .04	4	19.30
526	BD+ 5° 165	G5	*8.06*	7.77	1 13 25.852	+3.1130	+ .0085	+ .0038	+ 5 27 48.46	+19.025	− .151	− .041	4	19.13
527	*f* Piscium	A2	5.28	5.33	13 40.229	3.0963	+ .0074	− .0034	+ 3 11 36.53	19.018	.151	− .023	4	18.60
528	BD−19° 216	F5	9.9		13 48.731	2.9257	− .0031	+ .0036	−19 10 3.45	19.014	.143	+ .024	4	19.76
529	BD+29° 212	A5	9.2	8.3	14 14.625	3.3124	+ .0241	+ .0010	+29 24 9.58	19.002	.162	− .018	5	[illegible]
530	BD+66° 103	A0	*8.78*	9.2	14 18.31	4.0651	+ .1140	+ .0049	+66 46 54.77	19.000	.197	− .008	4	18.86
531	CD−27° 426	G0	9.9		1 14 22.516	+2.8530	− .0066	.0000	−27 16 54.16	+18.998	− .141	− .058	4	[illegible]
532	BD+50° 255	B9	*9.18*		14 28.688	3.5882	+ .0513	+ .001	+50 23 1.65	18.996	.174	+ .01	4	18.76
533	BD+40° 266		*9.17*		14 36.048	3.4428	+ .0361	+ .012	+40 53 45.69	18.992	.169	− .04	4	18.27
534	BD−21° 209		*9.6*		14 47.710	2.9082	− .0039	− .0024	−21 0 17.84	18.987	.144	− .006	4	18.68
535	BD− 7° 209	K0	8.9	8.8	14 52.544	3.0222	+ .0025	+ .003	− 6 42 51.13	18.985	.149	− .04	5	18.33
536	BD+79° 39	A0	*8.68*	8.4	1 14 56.91	+5.4372	+ .4003	− .0089	+79 42 36.55	+18.983	− .263	+ .002	4	19.38
537	φ Cassiopeiae	F5	5.25	5.41	15 2.201	3.7555	+ .0704	+ .0012	+57 48 41.52	18.980	.184	+ .005	4	18.64
538	BD+23° 176	G0	*8.73*	8.26	15 3.084	3.2640	+ .0109	+ .0129	+23 59 8.48	18.980	.161	− .135	5	19.64
539	υ Piscium	A2	4.67	4.98	15 3.875	3.2903	+ .0220	+ .0017	+26 50 38.27	18.980	.162	− .012	4	18.65
540	CD−29° 414	G0	[illegible]		15 11.555	2.8280	− .0076	+ .0085	−29 36 35.96	18.976	.141	+ .030	5	20.69

497. 6^{m}49, 24″, 64°.

502. 9^{m}5-11^{m}0, 0″7, 88°.

513. 6^{m}9 to 8^{m}1.

524. 9^{m}2-9^{m}6, 0″2, 227°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
541	BD+38° 241	G5	*8.28*	8.38	1 15 34.746	+3.4191	+0.0335	+0.001	+38 40 26.03	+18.965	−0.170	0.00	6	20.31
542	BD− 0° 201	K0	8.3	8.63	15 36.392	3.0703	+ .0057	+ .0065	− 0 18 54.33	18.964	.153	+ .002	4	17.85
543	Lal 2406	G5	7.7	8.30	15 39.981	2.8673	− .0057	− .0010	−25 22 7.22	18.963	.143	− .173	4	18.75
544	BD−10° 284	F8	9.1	8.66	15 52.114	2.9930	+ .0010	+ .0032	−10 23 42.86	18.957	.150	− .016	4	18.61
545	Lal 2416 *m.*	G0	6.75	7.16	16 1.763	2.9460	− .0016	+ .0024	−16 13 54.51	18.952	.148	− .093	4	17.89
546	BD+ 1° 248	K2	*8.6*	8.98	1 16 12.595	+3.0885	+ .0069	− .0011	+ 2 4 5.73	+18.947	− .156	− .015	6	18.49
547	BD+69° 89		*8.78*	9.1	16 15.57	4.2710	+ .1433	+ .0002	+69 59 8.14	18.946	.211	− .022	4	18.30
548	BD− 9° 260		9.9		16 36.682	3.0046	+ .0017	+ .001	− 8 50 1.53	18.936	.152	+ .02	4	18.13
549	ι Piscium	K0	5.60	5.28	16 41.647	3.3092	+ .0233	+ .0018	+28 19 14.39	18.933	.167	− .076	4	19.12
550	Wi (2) 1^{h} 265	K5	7.24	6.91	16 54.281	3.2501	+ .0185	+ .0005	+21 57 19.23	18.927	.164	− .010	4	18.51
551	BD+52° 312	A0	*9.00*	9.35	1 16 58.116	+3.6480	+ .0563	+ .004	+52 33 48.77	+18.925	− .183	− .02	4	18.80
552	Wi (1) 1^{h} 209 *m.*	F0	6.89	7.00	17 5.759	3.1594	+ .0118	+ .0017	+11 7 3.31	18.922	.160	+ .006	5	18.23
553	BD+81° 39		*9.04*		17 14.90	6.3474	+ .6584	+ .0002	+82 18 49.96	18.917	.314	+ .023	4	18.55
554	ξ Andromedæ	K0	4.99	5.46	17 37.273	3.5184	+ .0423	+ .0039	+45 6 36.08	18.907	.179	+ .004	5	20.25
555	BD+35° 256		*9.28*	8.8	17 38.582	3.3879	+ .0299	+ .002	+35 21 43.64	18.906	.172	+ .03	4	19.00
556	BD+58° 226	A0	*9.10*		1 17 52.752	+3.8134	+ .0750	− .004	+58 58 43.50	+18.899	− .193	− .01	4	18.96
557	BD+13° 204	G5	*8.28*	7.83	17 58.002	3.1832	+ .0133	− .001	+13 55 20.05	18.896	.163	+ .01	4	18.77
558	BD+28° 225	K0	8.3	8.45	17 59.652	3.3142	+ .0234	+ .0031	+28 26 5.29	18.896	.169	− .034	4	19.10
559	BD+ 4° 232	K0	9.21	9.15	18 17.130	3.1144	+ .0085	+ .0028	+ 5 19 5.56	18.887	.160	− .063	5	20.53
560	BD−13° 246	G5	9.4		18 19.835	2.9704	.0000	.000	−12 52 12.09	18.886	.153	+ .03	5	20.39
561	BD+32° 245	K5	*7.65*	7.38	1 18 42.132	+3.3635	+ .0274	− .001	+32 52 18.58	+18.875	− .173	+ .01	4	19.20
562	BD+68° 101		*9.22*		18 50.91	4.2205	+ .1306	+ .0062	+68 33 33.64	18.871	.214	+ .007	4	18.62
563	BD+ 8° 218	F0	*7.60*	7.47	18 54.838	3.1423	+ .0105	+ .002	+ 8 46 14.56	18.869	.163	− .05	5	18.84
564	BD+47° 398	K2	7.74	7.62	18 58.884	3.5734	+ .0471	− .003	+47 57 32.00	18.867	.184	− .01	4	19.06
565	BD+73° 71	A0	*7.50*	7.73	19 12.44	4.6207	+ .1983	− .0021	+73 41 54.02	18.860	.236	− .005	4	19.09
566	BD+43° 283	A2	8.6	8.67	1 19 19.630	+3.5018	+ .0398	− .006	+43 25 26.09	+18.856	− .181	+ .01	4	19.55
567	CD−23° 507		9.4	ft.	19 20.201	2.8811	− .0044	+ .0020	−22 54 35.22	18.856	.151	+ .020	5	20.55
568	BD+17° 200	F0	6.81	6.68	19 32.681	3.2152	+ .0156	+ .0045	+17 24 6.45	18.850	.167	− .034	4	19.24
569	BD−14° 270	G0	8.9	8.72	19 33.343	2.9565	− .0005	+ .0040	−14 20 29.07	18.850	.155	+ .014	4	19.58
570	BD−16° 232	F5	8.4	8.53	19 37.988	2.9367	− .0015	+ .0015	−16 38 23.84	18.847	.153	+ .009	4	19.58
571	BD+11° 176	A5	*9.81*		1 19 45.600	+3.1695	+ .0123	.000	+11 59 35.19	+18.843	− .165	− .02	4	19.34
572	Lac 384	K5	5.82	5.69	19 47.740	2.7948	− .0079	+ .0002	−31 21 44.39	18.842	.147	− .055	4	19.84
573	BD− 4° 199		9.3	9.4	19 57.941	3.0364	+ .0039	− .0011	− 4 32 44.14	18.837	.159	+ .011	5	20.69
574	θ Ceti	K0	3.83	3.75	20 1.462	3.0036	+ .0020	− .0054	− 8 35 44.55	18.836	.158	− .213	132 151	18.05 17.50
575	BD+53° 297	A	*8.92*	9.1	20 7.782	3.7022	+ .0602	+ .002	+53 58 26.26	18.832	.192	− .02	4	19.61
576	BD+62° 248	F8	*8.72*	8.49	1 20 10.04	+3.9785	+ .0939	+ .003	+63 10 39.89	+18.831	− .207	− .05	5	18.91
577	ψ Cassiopeiæ *br.*	K0	4.96	4.94	20 15.60	4.1913	+ .1238	+ .0140	+67 42 46.78	18.828	.218	+ .034	12	20.00
578	BD+19° 230	G0	*8.30*	7.88	20 26.616	3.2376	+ .0171	+ .0063	+19 44 27.99	18.823	.171	+ .050	4	19.61
579	BD+84° 23		*8.22*	8.8	20 28.27	8.3016	+1.4084	+ .0666	+84 58 35.72	18.822	.424	− .041	4	19.61
580	BD+ 2° 203		*9.3*	9.1	20 32.604	3.0936	+ .0073	+ .0031	+ 2 35 47.11	18.820	.163	+ .008	4	18.40
581	δ Cassiopeiæ	A5	2.80	2.99	1 20 33.966	+3.8640	+ .0787	+ .0401	+59 49 11.92	+18.819	− .202	− .046	5	18.04
582	Wi (1) 1^{h} 280	G5	6.38	6.4	20 44.744	3.0464	+ .0045	+ .0008	− 3 15 53.05	18.814	.162	− .019	4	19.57
583	CD−29° 448		9.5		20 44.921	2.8152	− .0066	+ .0045	−29 10 46.20	18.814	.150	− .012	4	20.04
584	BD− 6° 269		9.3		20 52.634	3.0219	+ .0031	+ .002	− 6 16 59.48	18.810	.160	− .14	4	18.31
585	BD+39° 328	A3	8.67	8.48	21 6.628	3.4653	+ .0358	+ .005	+40 17 13.71	18.803	.183	+ .01	6	20.71
586	BD−18° 228		10.5		1 21 10.903	+2.9199	− .0021	+ .0060	−18 15 0.29	+18.801	− .156	+ .024	4	19.79
587	BD+15° 209		*9.57*	9.1	21 36.062	3.2010	+ .0144	+ .002	+15 24 0.03	18.788	.170	− .02	4	19.18
588	CD−27° 478	A3	8.2	8.5	21 44.176	2.8363	− .0058	.0000	−26 52 25.78	18.784	.152	+ .010	4	19.00
589	BD+31° 251		*9.40*	9.4	21 54.391	3.3648	+ .0268	+ .0094	+31 59 50.90	18.779	.180	− .016	[illegible]	18.25
590	BD+55° 329	A0	*9.00*	9.5	22 1.352	3.7675	+ .0661	+ .005	+56 1 48.01	18.775	.201	− .03	4	19.22
591	Lal 2597	K0	6.87	6.75	1 22 18.258	+3.3103	+ .0223	− .0003	+26 49 56.34	+18.766	− .178	− .054	4	19.12
592	94 Piscium	K0	5.63	5.70	22 22.202	3.2330	+ .0166	+ .0035	+18 49 34.71	18.764	.174	− .057	5	19.79
593	BD+51° 308	K0	*7.90*	8.01	22 42.082	3.6636	+ .0544	+ .0040	+51 23 38.77	18.754	.196	− .006	4	19.01
594	BD− 9° 276	A3	8.62	8.56	22 47.308	2.9979	+ .0019	+ .002	− 9 0 10.24	18.752	.162	+ .02	4	18.56
595	ω Andromedæ *br.*	F5	4.96	5.3	22 51.653	3.5453	+ .0425	+ .0324	+44 59 38.90	18.749	.190	− .096	4	20.50
596	Brad 192	F0	5.68	5.89	1 22 54.710	+2.9594	.0000	+ .0016	−13 28 19.60	+18.748	− .161	+ .004	4	19.19
597	BD+37° 286		*9.17*		23 14.645	3.4374	+ .0326	.000	+37 31 51.30	18.737	.186	− .01	5	20.53
598	BD− 0° 231	F2	8.3	8.56	23 17.918	3.0698	+ .0060	+ .0011	− 0 21 25.45	18.736	.167	− .007	4	19.56
599	BD+49° 387		9.0		23 20.244	3.6303	+ .0505	− .004	+49 33 16.36	18.735	.196	− .03	4	19.08
600	BD+ 3° 201	G5	*8.68*	8.67	23 26.311	3.1015	+ .0079	− .0018	+ 3 27 47.91	18.731	.169	− .032	4	19.54

545. $7^{m}5$–$7^{m}5$, 1″7, 4°. 552. $7^{m}4$–$7^{m}9$, 0″3, 55°. 577. 13^{m}, 2″9, 44°. 595. 12^{m}, 2″6, 99°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
601	BD+24° 217	F5	8.71	8.41	1 23 29.774	+3.2975	+ 0.0212	+0.0008	+25 16 3.44	+18.730	−0.179	−0.033	4	19.21
602	BD−21° 237	F2	6.86	7.04	23 33.775	2.8920	− .0030	+ .0030	−20 46 1.91	18.727	.158	+ .032	4	19.75
603	BD+21° 196		*9.58*		23 56.184	3.2684	+ .0189	.000	+22 14 22.95	18.716	.179	+ .05	4	19.12
604	BD−10° 311	G0	8.9		24 5.465	2.9843	+ .0014	+ .0025	−10 27 11.47	18.711	.164	+ .022	4	19.12
605	BD+59° 259	G0	*9.12*		24 9.438	3.8829	+ .0777	+ .006	+59 22 9.81	18.709	.211	.00	4	19.08
606	BD+ 7° 213	K0	6.44	6.22	1 24 11.070	+3.1363	+ .0100	+ .0049	+ 7 32 50.13	+18.708	− .172	− .003	4	18.92
607	BD+ 9° 172	K5	*8.29*	7.67	24 52.306	3.1582	+ .0114	− .001	+10 1 6.28	18.686	.175	+ .02	4	18.47
608	BD+24° 221	M0	9.1	8.21	24 52.603	3.2943	+ .0207	− .0015	+24 36 38.83	18.686	.182	− .009	4	18.33
609	BD+30° 230	F5	8.26	7.60	24 57.959	3.3577	+ .0255	+ .0011	+30 29 0.52	18.683	.185	− .107	4	18.38
610	CD−24° 633	G0	8.80	8.4	24 58.386	2.8494	− .0046	+ .0062	−24 45 14.71	18.683	.158	− .034	4	19.39
611	BD+46° 369	K0	9.4	8.9	1 25 13.225	+3.5855	+ .0453	+ .004	+46 33 40.46	+18.675	− .198	− .02	4	18.61
612	38 Cassiopeiæ	F5	5.95	5.52	25 15.09	4.3966	+ .1468	+ .0278	+69 51 12.61	18.674	.241	− .066	12	19.91
613	BD+12° 183		*9.56*		25 33.575	3.1795	+ .0127	.000	+12 21 11.82	18.664	.177	− .02	4	18.57
614	BD− 4° 218		9.3		25 38.797	3.0342	+ .0041	− .0009	− 4 31 2.24	18.662	.169	− .007	4	18.68
615	BD+27° 236	A2	8.1	7.87	25 40.792	3.3331	+ .0235	− .0029	+28 4 55.68	18.661	.186	− .006	4	18.48
616	48 Ceti	A0	5.13	5.45	1 25 45.895	+2.8749	− .0035	+ .0040	−22 2 34.00	+18.658	− .161	+ .002	4	19.57
617	Brad 201	K0	6.55	6.53	25 56.050	2.8337	− .0051	+ .0020	−26 1 52.90	18.653	.159	+ .021	4	19.79
618	μ Piscium	K2	5.12	4.79	25 59.459	3.1219	+ .0091	+ .0194	+ 5 43 54.87	18.651	.175	− .044	4	19.82
619	BD−16° 253	K2	7.87	7.71	26 3.983	2.9309	− .0009	+ .0016	−16 8 29.19	18.648	.165	− .016	4	19.53
620	BD+44° 320	A0	*9.41*	9.5	26 9.499	3.5625	+ .0427	− .002	+44 57 10.63	18.645	.198	+ .03	4	19.32
621	BD+57° 308	K0	*8.20*	8.25	1 26 13.481	+3.8514	+ .0724	− .005	+57 46 5.72	+18.643	− .214	− .01	4	18.51
622	BD+59° 264	B3	*8.75*		26 14.90	3.9284	+ .0812	+ .001	+60 8 51.59	18.642	.218	− .01	6	18.44
623	BD+70° 110		*8.46*	8.45	26 19.32	4.4903	+ .1596	+ .0095	+70 52 37.75	18.640	.248	− .033	4	19.78
624	BD+38° 275	B9	7.30	7.56	26 23.484	3.4722	+ .0346	− .0008	+39 4 56.30	18.638	.194	− .006	6	19.99
625	BD− 2° 228		9.4		26 33.521	3.0537	+ .0053	− .0042	− 2 12 33.36	18.632	.172	− .020	5	20.54
626	BD−14° 290	G5	8.9		1 26 34.670	+2.9454	− .0002	+ .0040	−14 29 11.67	+18.632	− .166	+ .042	4	19.09
627	η Piscium br.	G5	3.72	3.67	27 11.964	3.2051	+ .0144	+ .0020	+14 56 2.00	18.612	.182	− .010	101 59	19.22 19.94
628	Wi (2) 1515	B8	6.28	6.48	27 33.534	3.4137	+ .0294	− .0012	+34 23 18.50	18.600	.194	− .007	5	20.36
629	BD+50° 299	G0	*8.55*	8.8	27 35.844	3.6755	+ .0528	− .002	+50 24 46.44	18.599	.208	.00	4	19.16
630	BD+ 8° 242		*9.28*		27 57.682	3.1504	+ .0109	+ .006	+ 8 49 34.22	18.587	.181	+ .01	4	18.76
631	Oelt 1649	K5	7.17	6.98	1 28 22.048	+3.7782	+ .0628	− .0003	+54 32 2.68	+18.574	− .215	+ .002	4	19.18
632	BD+64° 187		*8.76*	9.3	28 26.89	4.1294	+ .1040	− .0011	+64 32 41.85	18.571	.235	+ .005	4	19.20
633	BD+41° 300	K0	8.6	8.72	28 42.822	3.5256	+ .0384	− .001	+41 55 1.78	18.562	.202	− .02	4	19.55
634	BD+26° 257	G0	9.1	9.2	28 47.814	3.3232	+ .0222	− .0069	+26 23 24.13	18.559	.191	− .011	4	18.59
635	BD−18° 254	K2	9.1	8.7	29 1.280	2.9080	− .0015	+ .0012	−18 1 20.63	18.552	.169	+ .001	4	19.53
636	BD+20° 240	K0	*9.38*		1 29 2.995	+3.2644	+ .0181	− .002	+20 44 31.00	+18.551	− .189	.00	4	19.55
637	BD− 6° 291	K5	9.4	9.4	29 8.900	3.0160	+ .0035	+ .001	− 6 23 10.41	18.548	.175	+ .02	4	19.56
638	BD+36° 276		9.2	8.63	29 14.336	3.4539	+ .0322	+ .006	+36 55 29.35	18.545	.199	− .01	4	19.55
639	BD−20° 290	A2	9.3		29 34.250	2.8822	− .0023	+ .0030	−20 30 56.01	18.534	.168	− .014	4	19.80
640	BD+17° 223		*9.22*	9.5	29 38.112	3.2356	+ .0161	.000	+17 43 53.96	18.532	.188	.00	4	19.13
641	Lal 2848	G0	5.88	5.95	1 29 41.281	+3.0062	+ .0030	+ .0118	− 7 26 1.68	+18.530	− .175	− .081	4	19.62
642	BD+ 1° 277	A3	*9.1*	8.56	29 48.376	3.0919	+ .0075	− .0009	+ 2 9 19.55	18.526	.180	− .005	5	18.88
643	BD+10° 206	F8	9.12	8.46	30 7.674	3.1677	+ .0119	− .002	+10 30 31.37	18.515	.185	− .01	5	21.01
644	BD+33° 258		*9.98*	9.10	30 22.217	3.4185	+ .0291	+ .010	+33 57 40.71	18.507	.199	− .04	4	18.40
645	BD− 0° 253	K0	8.1	7.71	30 29.028	3.0711	+ .0064	− .0006	− 0 10 34.72	18.503	.180	− .041	4	18.71
646	BD+53° 335	K0	*8.42*	8.58	1 30 29.828	+3.7888	+ .0625	+ .001	+54 19 35.87	+18.503	− .220	− .01	5	18.68
647	BD+65° 182	B9	8.30	8.32	30 33.46	4.2179	+ .1132	+ .0015	+65 48 42.51	18.501	.244	− .016	4	19.16
648	BD+67° 141	G	*8.67*	9.1	30 38.21	4.3160	+ .1264	+ .0200	+67 30 21.64	18.498	.250	− .006	4	19.50
649	CD−28° 490	Ma	6.96	6.30	30 40.356	2.7914	− .0056	− .0020	−28 38 46.10	18.497	.165	− .034	4	19.07
650	Brad 211	B9	6.20	6.46	31 29.569	3.2047	+ .0141	+ .0001	+14 15 9.99	18.469	.189	− .011	4	19.34
651	Brad 207	K0	6.17	6.4	1 31 33.178	+3.6564	+ .0489	− .0004	+48 18 53.00	+18.467	− .215	− .013	4	18.74
652	BD+16° 176	A5	5.88	6.01	31 34.836	3.2319	+ .0157	+ .0108	+17 1 29.25	18.466	.191	+ .023	4	19.59
653	BD−12° 294	A2	9.3	8.9	31 39.[illegible]	2.9588	+ .0010	− .002	−12 21 0.48	18.463	.176	− .02	4	19.78
654	α Urs Min	F8	2.12		31 42.29	20.641	+25.669	+ .154	+88 52 38.95	18.462	1.684	− .001	266 278	19.76 18.23
655	BD+ 0° 258	F5	*8.41*	8.38	31 48.712	3.0806	+ .0069	+ .0033	+ 0 51 56.00	18.458	.183	+ .054	4	19.11
656	BD+31° 280		9.3	9.1	1 31 58.205	+3.3959	+ .0270	+ .0037	+31 45 36.74	+18.453	− .201	− .005	4	19.29
657	BD+34° 280	F8	8.22	8.00	32 4.457	3.4414	+ .0304	+ .001	+35 12 29.08	18.449	.203	+ .03	5	18.44
658	Brad 213	K0	5.48	5.71	32 4.857	2.9247	− .0004	+ .0016	−15 48 32.54	18.448	.174	+ .017	5	20.52
659	40 Cassiopeiæ	K0	5.50	5.28	32 5.47	4.7438	+ .1802	− .0012	+72 37 58.65	18.448	.278	− .006	8	19.52
660	υ Andromedæ	G0	4.18	4.26	32 5.682	3.5272	+ .0373	− .0159	+41 0 21.80	18.448	.209	− .378	6	17.91

627. 11^m, 1″0, 19°

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
661	BD+ 3° 218 *br.*	K0	*7.87*	8.10	1 32 7.864	+3.1084	+0.0085	+0.0010	+ 3 54 21.22	+18.447	−0.185	+0.006	4	18.86
662	CD−23° 587		10.2		32 28.034	2.8512	− .0034	− .0015	−22 53 29.32	18.436	.171	− .014	6 5	19.96 21.00
663	BD+ 7° 239		9.8		32 31.295	3.1439	+ .0104	− .001	+ 7 43 13.81	18.434	.188	+ .07	4	19.05
664	BD+61° 304	B8	6.61	6.56	32 44.95	4.0600	+ .0907	+ .0006	+61 56 40.15	18.426	.241	+ .024	4	18.77
665	π Piscium	F0	5.63	5.64	32 51.305	3.1821	+ .0126	− .0051	+11 43 58.59	18.422	.191	+ .037	4	19.08
666	υ Persei	K0	3.77	3.70	1 33 4.326	+3.6636	+ .0488	+ .0061	+48 13 24.64	+18.415	− .219	− .112	4	18.88
667	BD+21° 220	F5	*7.82*	7.84	33 14.628	3.2880	+ .0192	+ .004	+22 8 58.54	18.409	.197	+ .02	5	20.54
668	Brad 205	B9	6.62	6.87	33 24.12	5.4744	+ .3243	+ .0045	+77 33 47.50	18.403	.324	− .008	8	19.50
669	BD+25° 269 *br.*	K0	8.82	8.55	33 28.004	3.3255	+ .0217	+ .0015	+25 29 49.14	18.401	.200	− .011	4	19.35
670	BD−10° 343	F5	6.40	6.28	33 37.742	2.9809	+ .0021	+ .0169	− 9 48 47.44	18.396	.180	+ .080	4	18.81
671	BD− 2° 259		8.6	8.9	1 33 46.336	+3.0568	+ .0058	− .0001	− 1 42 39.52	+18.391	− .185	− .019	4	19.56
672	CD−24° 685	G0	10.2		33 53.934	2.8331	− .0037	− .0007	−24 14 8.42	18.386	.173	+ .040	4	20.04
673	BD+51° 354	K0	*9.22*		34 11.218	3.7531	+ .0566	.000	+51 52 56.09	18.376	.227	+ .01	5 4	20.31 19.23
674	BD+43° 339		9.9		34 11.385	3.5804	+ .0410	.000	+43 33 41.57	18.376	.217	− .03	4	19.19
675	BD+ 1° 293	K0	7.09	7.20	34 12.048	3.0930	+ .0077	+ .0007	+ 2 10 45.86	18.376	.189	− .007	4	19.27
676	Lal 3002	K2	6.86	6.58	1 34 14.178	+3.2777	+ .0185	+ .0054	+20 59 30.12	+18.374	− .199	− .005	4	19.31
677	BD+35° 316		8.9	8.5	34 51.709	3.4674	+ .0317	.000	+36 17 26.08	18.353	.210	+ .01	4	19.32
678	BD+13° 255	K0	6.93	6.54	34 58.020	3.2057	+ .0139	+ .006	+13 52 48.86	18.349	.196	+ .01	4	18.90
679	BD+71° 93	A0	*8.50*	8.3	35 6.08	4.7155	+ .1783	− .0002	+71 50 34.03	18.344	.285	− .003	4	19.33
680	BD−14° 311	G0	8.8	8.8	35 7.632	2.9351	+ .0004	− .0020	−14 19 36.86	18.343	.181	− .025	5	19.57
681	BD+29° 279	F5	*8.25*	8.30	1 35 9.528	+3.3799	+ .0253	+ .0059	+29 40 47.53	+18.342	− .206	− .098	4	18.11
682	BD+58° 273	B9	6.88	7.05	35 11.723	3.9578	+ .0770	− .001	+58 38 52.02	18.341	.241	− .01	4	19.14
683	BD+64° 217		*8.84*	8.9	35 13.46	4.2125	+ .1067	+ .0006	+64 40 24.66	18.340	.256	− .011	4	19.60
684	BD+85° 32		*8.62*	9.5	35 32.70	10.557	+2.221	− .014	+85 51 53.28	18.328	.630	+ .021	4	19.17
685	τ Andromedæ	B8	4.90	5.17	35 50.998	3.5309	+ .0364	+ .0012	+40 10 20.69	18.318	.217	− .025	4	19.16
686	ω Cassiopeiæ	A0	5.54	5.74	1 36 23.63	+4.3991	+ .1296	+ .0097	+67 38 20.67	+18.297	− .270	− .002	12	19.88
687	BD−18° 282		10.3		36 37.122	2.8982	− .0009	+ .0017	−17 41 50.96	18.290	.180	− .015	4 5	21.46 20, 34
688	BD− 0° 260	F8	9.2	8.6	36 45.411	3.0727	+ .0067	− .0004	+ 0 0 19.41	18.285	.191	+ .009	5	18.26
689	BD+46° 424		8.6	8.05	36 45.777	3.6479	+ .0458	+ .006	+46 24 32.66	18.285	.225	− .03	4	19.78
690	BD+55° 386	A0	*8.82*	9.4	36 52.579	3.8754	+ .0671	+ .001	+55 40 13.85	18.281	.239	.00	4	19.51
691	BD+11° 216		*9.37*		1 36 52.920	+3.1862	+ .0128	+ .006	+11 41 34.25	+18.281	− .198	+ .03	4	18.84
692	BD− 6° 316	G0	8.8	8.3	36 57.622	3.0169	+ .0040	− .006	− 5 48 26.94	18.278	.188	− .02	5	20.37
693	BD+56° 321	B9	*8.15*	8.31	37 4.208	3.9114	+ .0706	.000	+56 46 53.28	18.274	.243	− .02	4	19.33
694	ν Piscium	K0	4.68	4.21	37 15.954	3.1217	+ .0093	− .0014	+ 5 4 59.76	18.267	.196	+ .001	64 52	18.05 17.86
695	BD+19° 277	K2	8.3	7.70	37 17.435	3.2668	+ .0174	.000	+19 25 15.03	18.266	.203	− .07	5	17.99
696	BD+27° 271	A2	8.8	8.80	1 37 19.823	+3.3621	+ .0236	+ .0009	+27 43 18.76	+18.265	− .210	+ .004	5	20.36
697	BD+66° 151	A2	*8.60*	8.9	37 23.08	4.3464	+ .1213	− .0042	+66 36 39.06	18.263	.269	+ .010	5	18.93
698	CD−28° 529	G5	8.9	8.5	37 23.176	2.7747	− .0050	− .0015	−28 24 49.12	18.263	.175	− .002	4	19.62
699	CD−26° 593	K2	9.2		37 35.062	2.7974	− .0043	− .0004	−26 30 39.71	18.255	.176	− .023	4	19.74
700	BD+30° 262	F2	*8.92*	8.97	37 39.938	3.4012	+ .0261	− .0054	+30 44 8.34	18.252	.213	+ .020	5	18.55
701	BD+23° 223		*9.73*		1 37 49.588	+3.3186	+ .0206	+ .007	+23 57 49.05	+18.247	− .208	.00	5	20.50
702	Grmb 371	K0	6.46	6.30	38 23.753	3.6274	+ .0434	+ .0126	+44 55 10.48	18.226	.228	+ .009	4	18.61
703	π Sculptoris	K0	5.28		38 32.025	2.7147	− .0065	− .0047	−32 43 47.81	18.221	.172	− .030	4	18.94
704	φ Persei	B0	4.19	4.23	38 38.159	3.7439	+ .0534	+ .0029	+50 17 10.83	18.217	.235	− .018	4	18.88
705	Pulk (55) 245	G5	5.27	5.25	38 40.735	3.0328	+ .0049	+ .0012	− 4 5 33.76	18.216	.193	− .022	9	18.79
706	BD+62° 298	K0	*8.18*	8.39	1 39 7.26	+4.1516	+ .0953	− .007	+62 33 50.82	+18.199	− .262	− .01	4	19.10
707	BD+52° 424	A2	8.05	8.0	39 14.568	3.8111	+ .0594	.000	+52 47 13.05	18.195	.241	.00	4	18.53
708	BD+32° 307	G0	*8.65*	8.42	39 21.124	3.4281	+ .0278	− .002	+32 20 14.20	18.191	.217	+ .02	4	18.54
709	BD− 7° 283	A	9.1	8.48	39 21.716	2.9989	+ .0035	+ .001	− 7 29 20.79	18.191	.191	+ .01	4	18.86
710	BD+73° 96	A2	*8.92*		39 25.65	5.0467	+ .2234	+ .0041	+74 6 56.55	18.188	.317	− .028	4	19.13
711	BD+ 5° 232	K0	8.06	7.54	1 39 28.123	+3.1253	+ .0095	+ .0005	+ 5 20 34.71	+18.187	− .199	− .002	4	19.14
712	BD−20° 324	G0	8.43	8.36	39 42.396	2.8699	− .0015	+ .0060	−19 48 22.67	18.178	.183	+ .028	5	20.03
713	CD−24° 729	K0	9.4		39 49.175	2.8140	− .0033	+ .0036	−24 34 9.95	18.174	.181	− .037	5	19.49
714	BD+10° 234	K5	8.77	8.9	40 18.398	3.1778	+ .0122	− .003	+10 30 25.17	18.156	.205	− .01	4	18.56
715	τ Ceti	K0	3.65	4.06	40 21.151	2.9064	− .0002	− .1193	−16 21 30.63	18.154	.188	+ .858	4	19.40
716	BD+44° 360	F2	*8.54*	8.7	1 40 38.285	+3.6292	+ .0427	− .001	+44 24 18.81	+18.143	− .232	+ .01	4	18.15
717	BD+34° 304	A5	7.47	7.81	40 41.480	3.4753	+ .0308	− .0010	+35 18 41.06	18.141	.223	− .003	7	21.02
718	BD−12° 324	G5	9.9		40 42.870	2.9552	+ .0019	+ .0016	−11 40 33.33	18.141	.191	− .124	4	19.96
719	BD− 1° 237		9.1		40 53.143	3.0582	+ .0062	+ .0120	− 1 27 31.02	18.134	.197	− .049	4	19.53
720	BD+54° 373	B2	*8.88*		40 58.710	3.8675	+ .0637	− .003	+54 21 30.88	18.131	.249	.00	5 4	20.61 20.02

661. 11^{m}7, 5″3, 195°.

669. 11^{m}2, 4″2, 218°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
721	ο Piscium	K0	4.50	4.36	1 41 9.984	+ 3.1606	+0.0112	+0.0046	+ 8 45 20.28	+18.124	−0.205	+0.051	82 68	19.17 19.24
722	BD+37° 362		*9.32*		41 10.414	3.5167	+ .0338	+ .001	+37 52 7.96	18.124	.227	.00	5	20.19
723	BD+15° 255		*9.58*		41 11.494	3.2350	+ .0153	.000	+15 51 55.86	18.123	.209	+ .03	4	18.67
724	BD−22° 290	G0	8.3	7.90	41 38.106	2.8365	− .0025	+ .0006	−22 23 16.51	18.106	.185	− .008	4	18.82
725	ε Sculptoris *br.*	F0	5.44	6.2	41 53.965	2.7991	− .0036	+ .0116	−25 27 6.78	18.096	.184	− .057	4	18.55
726	Pi 1h 159	K0	5.74	5.49	1 41 56.41	+ 4.2239	+ .1008	+ .0878	+63 27 30.23	+18.095	− .272	− .237	4	18.34
727	BD+83° 38		*8.52*	8.8	41 58.59	8.4843	+1.1514	+ .0150	+83 55 58.57	18.093	.536	+ .025	4	19.06
728	BD+21° 236		*9.67*		42 8.305	3.2989	+ .0190	+ .006	+21 26 30.63	18.087	.214	.00	4	19.08
729	Lac 513	A5	6.42	6.5	42 19.057	2.7692	− .0043	+ .0064	−27 44 53.68	18.081	.182	− .044	4	18.22
730	BD+ 1° 316		*9.2*	9.2	42 23.644	3.0959	+ .0081	+ .0027	+ 2 18 5.26	18.078	.202	− .054	4	18.85
731	BD+45° 447	F5	6.32	6.53	1 42 52.801	+ 3.6697	+ .0451	+ .0013	+45 49 54.18	+18.059	− .240	− .057	4	18.90
732	BD− 3° 258	F0	8.1	7.9	43 0.236	3.0371	+ .0054	+ .0049	− 3 30 51.98	18.054	.200	− .028	4	18.24
733	Wi (1) 1h 719	B9	6.76	6.93	43 4.178	2.9248	+ .0009	+ .0012	−14 17 18.53	18.052	.194	+ .018	4	18.40
734	BD+27° 282	G5	*8.49*	8.35	43 10.985	3.3831	+ .0241	+ .0026	+28 5 16.30	18.048	.222	+ .024	5	18.77
735	CD−26° 631	K0	8.5	8.5	43 27.479	2.7872	− .0036	− .0006	−26 5 37.40	18.037	.185	+ .004	4	18.50
736	BD−17° 319	K5	8.3	7.89	1 43 47.046	+ 2.8870	− .0004	+ .0039	−17 37 1.86	+18.025	− .191	+ .011	4	18.36
737	Brad 235	A0	5.73	5.89	43 50.356	3.2466	+ .0158	+ .0033	+16 33 27.36	18.023	.215	− .025	4	18.10
738	Lal 3301	K0	6.69	6.50	43 51.123	2.8453	− .0018	− .0013	−21 14 35.66	18.022	.190	− .047	5	19.56
739	BD+56° 357 *m.*	F8	*8.58*	8.7	44 11.760	3.9543	+ .0701	− .002	+56 21 2.17	18.009	.262	− .05	4	18.14
740	BD+48° 534	G5	*8.95*	9.20	44 13.300	3.7466	+ .0510	− .006	+48 56 37.34	18.008	.248	− .03	5	18.73
741	BD− 9° 342	K0	9.21	8.58	1 44 15.968	+ 2.9730	+ .0028	− .0007	− 9 38 19.72	+18.006	− .198	.000	5	20.20
742	BD+13° 278		*9.13*		44 20.461	3.2156	+ .0141	+ .010	+13 39 52.55	18.003	.214	− .04	4	18.52
743	BD+61° 334	G5	*8.15*	7.96	44 23.11	4.1669	+ .0920	− .002	+61 45 12.61	18.002	.275	.00	4	19.35
744	BD+ 3° 245		*9.37*	9.2	44 25.246	3.1080	+ .0086	− .0011	+ 3 26 10.98	18.000	.207	− .017	4	19.78
745	BD+41° 353	F0	8.5	8.62	44 25.972	3.5947	+ .0386	− .002	+41 35 29.48	18.000	.239	+ .01	5	19.82
746	BD+19° 289	G5	*8.83*	9.15	1 44 27.297	+ 3.2882	+ .0181	− .001	+20 7 23.60	+17.999	− .219	− .07	4	19.31
747	Grmb 379	F5	6.92	7.08	44 34.24	5.3003	+ .2545	+ .0173	+75 11 37.71	17.995	.348	− .043	9	19.56
748	BD+31° 318		9.3	8.5	44 44.942	3.4416	+ .0276	+ .0031	+32 1 36.23	17.988	.229	− .072	5	20.71
749	BD+ 0° 294	A3	*7.85*	7.75	44 53.375	3.0823	+ .0076	+ .0011	+ 0 56 1.82	17.982	.206	+ .002	4	19.00
750	Wi (2) 1h 956	B8	6.73	7.08	44 57.490	3.3618	+ .0225	+ .0005	+26 4 31.37	17.980	.224	− .020	4	18.35
751	BD−16° 309		9.3	8.7	1 45 4.924	+ 2.9051	+ .0004	+ .006	−15 49 28.02	+17.975	− .195	− .05	4	19.56
752	BD+37° 379	F0	*8.49*	8.6	45 21.424	3.5387	+ .0342	+ .003	+38 9 51.16	17.964	.236	.00	4	18.07
753	χ Ceti	F0	4.77	5.04	45 39.279	2.9563	+ .0023	− .0108	−11 4 54.00	17.953	.199	− .079	4	19.14
754	BD+ 7° 286	K0	8.3	8.32	45 39.454	3.1507	+ .0106	+ .002	+ 7 28 33.75	17.952	.212	− .01	5	19.42
755	BD− 5° 323	M0	8.9	8.32	45 52.936	3.0179	+ .0047	+ .0025	− 5 15 22.18	17.944	.204	− .020	4	18.33
756	BD+86° 27		*8.87*		1 45 59.95	+13.038	+3.346	− .027	+86 34 33.21	+17.939	− .856	+ .019	4	20.02
757	BD− 7° 306	A5	8.9	8.57	46 0.884	2.9983	+ .0040	.000	− 7 6 51.63	17.939	.203	+ .07	4	18.18
758	BD+42° 388	K0	7.8	7.77	46 15.542	3.6325	+ .0410	.000	+43 7 45.43	17.929	.244	− .02	6	20.54
759	CD−29° 602	K0	7.42	6.90	46 18.750	2.7353	− .0046	+ .0021	−29 26 14.37	17.927	.187	− .016	4	18.53
760	BD+57° 407 *s. pr.*	A0	*9.20*		46 27.953	4.0395	+ .0769	− .004	+58 13 50.11	17.921	.271	.00	5	20.54
761	BD+51° 418	A0	*8.48*	8.28	1 46 28.021	+ 3.8228	+ .0566	+ .0004	+51 24 15.61	+17.921	− .257	+ .004	6 5	20.93 20.18
762	BD+23° 246	A5	6.89	7.40	46 45.218	3.3432	+ .0211	+ .0004	+24 15 23.93	17.909	.227	− .056	5	18.25
763	Rad (45) 526	K0	7.60	7.07	46 47.95	6.6671	+ .5388	+ .0480	+80 30 59.02	17.908	.443	− .065	8	19.27
764	BD+ 3° 249	F8	*8.59*	8.35	46 51.286	3.1129	+ .0089	+ .0028	+ 3 49 32.19	17.906	.212	− .058	4	18.71
765	BD+29° 316	A2	*9.18*	9.3	47 1.777	3.4193	+ .0257	− .0020	+29 56 50.26	17.899	.232	.000	4	18.74
766	2 Persei	B9	5.64	5.88	1 47 3.372	+ 3.8001	+ .0543	+ .0025	+50 23 52.92	+17.898	− .257	− .029	4	20.32
767	BD+17° 273	G0	*8.50*	8.4	47 10.129	3.2697	+ .0169	− .002	+18 6 45.59	17.893	.222	+ .02	5	18.12
768	ζ Ceti	K0	3.92	4.04	47 30.657	2.9582	+ .0025	+ .0025	−10 43 47.26	17.880	.203	− .032	74 36	20.50 19.56
769	BD+46° 467		8.9	8.7	47 34.958	3.7273	+ .0480	− .003	+47 16 35.08	17.878	.254	+ .02	4	18.21
770	BD+12° 246 *m.*	A3	8.9	8.9	47 40.036	3.2127	+ .0138	.000	+13 1 54.51	17.874	.219	+ .01	4	18.33
771	BD−19° 326	A0	9.13	8.6	1 47 40.240	+ 2.8565	− .0010	+ .0040	−19 40 9.56	+17.873	− .195	− .022	4	19.61
772	BD+65° 210	G5	7.88	8.3	48 9.00	4.4234	+ .1177	− .0071	+65 47 6.96	17.854	.301	− .136	4	18.89
773	α Trianguli	F5	3.58	3.72	48 30.943	3.4131	+ .0252	+ .0013	+29 11 23.16	17.840	.234	− .232	4	18.29
774	BD− 1° 255	F8	9.1		48 36.779	3.0618	+ .0068	− .0037	− 1 1 42.37	17.836	.211	− .017	4	19.13
775	ε Cassiopeiæ	B3	3.44	3.4	48 37.29	4.2842	+ .1010	+ .0057	+63 16 36.82	17.836	.202	− .017	5	18.55
776	BD+49° 486	K0	6.98	6.92	1 48 49.402	+ 3.7893	+ .0525	− .001	+49 32 56.99	+17.828	− .260	− .02	4	18.64
777	BD+39° 427	F8	7.9	7.68	48 51.166	3.5763	+ .0359	+ .0065	+39 29 18.31	17.826	.246	+ .033	4	19.33
778	BD+42° 394	A	9.2		48 55.436	3.6339	+ .0402	− .003	+42 32 33.94	17.824	.250	− .03	4	19.03
779	BD+72° 109		*9.10*		48 58.82	5.1119	+ .2122	− .0114	+73 18 2.07	17.821	.349	+ .006	4	18.73
780	BD+33° 313	F5	8.6	8.70	49 1.938	3.4871	+ .0301	+ .002	+34 6 7.90	17.819	.241	− .07	6	20.18

725. 8.8, 4″.7, 15°. 739. 9.1-9.6, 0″.4, 128°. 760. 9.4, 5″.0, 22°. 770. 9.5-9.7, 0″.2, 135°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
781	BD+ 6° 294		9.8		1 49 5.879	+3.1439	+0.0103	−0.002	+ 6 38 7.66	+17.817	−0.218	+0.01	4	18.78
782	γ Arietis *s.*	A0	4.75	4.93	49 8.218	3.2825	+ .0173	+ .0057	+18 54 7.56	17.815	.227	− .108	4	19.65
783	BD−21° 331	G0	9.0		49 16.745	2.8328	− .0015	− .0026	−21 21 55.28	17.809	.198	+ .010	5	20.60
784	ξ Piscium	K0	4.84	4.57	49 24.707	3.1027	+ .0084	+ .0015	+ 2 47 35.57	17.804	.216	+ .025	45 32	18.36 19.08
785	46 Cassiopeiæ	B8	5.03	5.31	49 45.69	4.6197	+ .1401	+ .0016	+68 17 35.20	17.789	.318	− .004	12	20.46
786	BD−13° 347		9.1	8.2	1 49 46.379	+2.9233	+ .0015	+ .0056	−13 38 23.98	+17.789	− .203	− .124	4	18.77
787	CD−23° 697	F5	9.4		50 0.504	2.8041	− .0022	.0000	−23 31 23.00	17.780	.196	+ .050	5	20.24
788	Wi (1) 1^h 837	Ma	7.05	6.84	50 8.633	3.1638	+ .0112	.0000	+ 8 23 16.29	17.775	.221	+ .003	4	18.06
789	β Arietis	A5	2.72	3.09	50 12.999	3.3028	+ .0184	+ .0068	+20 25 3.22	17.772	.231	− .111	58 49	20.28 20.02
790	BD−11° 367	K0	8.9	8.9	50 31.504	2.9475	+ .0023	.0000	−11 25 18.16	17.759	.207	− .020	4	18.18
791	BD− 3° 282	G0	9.6		1 51 9.234	+3.0393	+ .0059	+ .0016	− 3 4 9.41	+17.733	− .215	− .009	4	18.38
792	BD+63° 261		*9.18*	9.1	51 39.22	4.3357	+ .1038	− .002	+63 39 0.98	17.713	.303	+ .01	5	18.11
793	BD+45° 487		*8.64*	8.52	51 44.882	3.7240	+ .0460	− .002	+46 7 58.40	17.709	.261	+ .03	5	20.53
794	BD+34° 338		*8.64*	8.42	51 56.779	3.5160	+ .0311	− .001	+35 15 20.43	17.701	.248	+ .01	6	20.13
795	BD− 5° 346		10.1		52 8.590	3.0133	+ .0048	+ .0017	− 5 24 4.81	17.693	.214	.000	4	18.76
796	BD−17° 352		10.1	ft.	1 52 17.360	+2.8776	+ .0002	+ .0045	−17 14 4.94	+17.687	− .206	+ .020	4	19.57
797	BD+14° 312		8.9	9.1	52 25.989	3.2356	+ .0147	− .002	+14 30 15.14	17.682	.230	+ .01	4	18.89
798	BD−19° 341	F2	8.7	8.3	52 26.298	2.8558	− .0005	− .0005	−19 0 31.75	17.681	.204	.000	4	18.45
799	BD+57° 434	A0	*8.52*	8.85	52 35.465	4.0651	+ .0751	.000	+57 34 25.35	17.675	.288	.00	4	19.13
800	BD+75° 82		*8.70*		52 38.65	5.6441	+ .2930	+ .0157	+76 13 7.69	17.673	.396	.000	4	18.21
801	BD+25° 328	G5	*9.57*		1 52 42.736	+3.3732	+ .0221	− .0020	+25 27 34.97	+17.669	− .240	− .030	4	18.31
802	BD+18° 251		*9.03*	8.69	52 50.114	3.2888	+ .0174	.000	+18 53 10.84	17.664	.234	+ .02	4	18.95
803	CD−28° 609	K0	8.1	8.0	52 58.583	2.7371	− .0035	− .0010	−27 57 16.65	17.659	.196	− .025	4	19.18
804	BD+40° 408	F5	6.84	6.4	53 4.473	3.6109	+ .0372	+ .0090	+40 22 21.31	17.655	.256	− .084	6	19.04
805	BD− 7° 328		9.6	9.1	53 7.584	2.9935	+ .0043	− .002	− 7 7 40.36	17.652	.215	+ .01	4	18.56
806	Wi (2) 1^h 1166	Mb	7.21	6.82	1 53 27.130	+3.4503	+ .0265	− .0021	+30 44 44.14	+17.639	− .249	− .044	5	18.04
807	λ Arietis	A5	4.91	5.41	53 27.959	3.3449	+ .0204	− .0068	+23 12 23.53	17.638	.241	− .018	4	18.48
808	BD+55° 466	G5	*7.07*	7.58	54 12.119	3.9960	+ .0677	.000	+55 19 34.75	17.608	.287	− .03	4	18.25
809	BD−15° 352	G0	8.3	8.2	54 12.505	2.8996	+ .0010	− .003	−15 9 43.00	17.607	.210	+ .05	4	18.53
810	BD+28° 335	G5	*8.53*	8.52	54 19.118	3.4194	+ .0246	+ .0023	+28 28 28.14	17.603	.246	− .036	5	19.55
811	BD+ 0° 321		*9.63*		1 54 19.311	+3.0768	+ .0075	− .0008	+ 0 22 9.72	+17.603	− .222	+ .018	4	18.47
812	BD+ 6° 310	G	9.1	8.99	54 47.450	3.1531	+ .0107	− .003	+ 7 8 36.43	17.583	.228	− .01	4	18.35
813	Cape (80) 783 *br.*	G5	6.34		54 54.940	2.6483	− .0050	+ .0017	−33 27 19.88	17.578	.194	− .019	4	19.17
814	BD+78° 67		*8.70*		55 0.93	6.3045	+ .4144	− .0191	+78 45 0.09	17.574	.449	+ .111	4	18.17
815	BD+26° 336	K0	8.7	8.37	55 3.925	3.4038	+ .0236	− .0008	+27 14 31.91	17.571	.246	− .002	4	18.26
816	CD−25° 780		10.4		1 55 8.669	+2.7687	− .0025	+ .0009	−25 17 13.65	+17.568	− .202	− .045	4	19.04
817	Pi 1^h 223	A2	6.14	6.14	55 8.708	3.2084	+ .0133	− .0001	+11 54 26.50	17.568	.233	− .035	4	18.55
818	Lal 3606	A0	6.74	7.06	55 11.826	4.1688	+ .0833	+ .0085	+59 34 20.40	17.566	.301	− .045	5	19.33
819	BD+15° 290	G0	*8.21*	8.13	55 26.042	3.2524	+ .0155	− .002	+15 34 13.22	17.556	.237	− .01	4 3	18.24 19.40
820	Brad 271	G0	5.84	5.93	55 59.306	3.1034	+ .0087	+ .0155	+ 2 42 54.60	17.532	.227	− .244	4	17.83
821	υ Ceti	Ma	4.18	4.29	1 56 14.117	+2.8175	− .0011	+ .0093	−21 27 53.64	+17.522	− .208	− .020	4	18.80
822	CD−29° 676	F0	8.7		56 24.283	2.7058	− .0037	+ .0024	−29 26 53.22	17.515	.201	− .003	5	20.49
823	Paris 2509	Mb	5.72	5.95	56 28.558	2.9708	+ .0035	+ .0058	− 8 54 38.73	17.512	.218	− .009	4	17.52
824	50 Cassiopeiæ	A2	4.06	4.27	56 34.25	5.0798	+ .1920	− .0083	+72 2 6.01	17.507	.368	+ .023	8	18.58
825	BD+32° 363		*8.65*	8.60	56 49.488	3.4950	+ .0287	+ .002	+32 55 43.56	17.496	.255	− .03	5	19.03
826	BD−13° 364	G5	8.9	8.4	1 56 53.955	+2.9189	+ .0019	+ .0140	−13 15 52.67	+17.494	− .214	+ .121	5	19.51
827	Brad 269	B8	4.99	5.33	56 57.729	3.9745	+ .0641	+ .0047	+54 6 5.34	17.491	.290	+ .003	4	19.30
828	BD− 3° 300	G0	7.9	7.88	57 0.563	3.0398	+ .0061	+ .0046	− 2 52 58.63	17.489	.224	+ .059	5	19.54
829	53 Cassiopeiæ	B5	5.62	5.46	57 3.75	4.4124	+ .1068	+ .0014	+64 0 15.69	17.487	.322	+ .005	4	19.29
830	BD+44° 407		*9.92*		57 8.849	3.7289	+ .0444	+ .004	+45 6 29.10	17.483	.273	+ .01	4	18.27
831	BD−11° 386	F8	7.68	7.4	1 57 9.737	+2.9404	+ .0027	+ .0051	−11 26 15.46	+17.482	− .218	+ .085	4	18.94
832	BD+50° 427	K2	*8.88*		57 13.142	3.8780	+ .0559	+ .001	+50 54 56.16	17.480	.284	+ .01	5	18.26
833	BD−21° 362	F5	8.8		57 32.264	2.8173	− .0010	− .0025	−21 17 8.41	17.466	.209	+ .080	4	18.68
834	BD+21° 270	F5	7.27	7.23	57 39.758	3.3342	+ .0194	− .001	+21 43 9.93	17.461	.246	− .05	4	18.45
835	BD+36° 394	F0	8.1	8.50	57 43.959	3.5696	+ .0332	.000	+37 6 49.78	17.458	.263	− .01	5	19.54
836	BD+11° 264 *m.*	F5	8.53	8.64	1 57 48.659	+3.2099	+ .0133	− .002	+11 47 44.92	+17.455	− .238	− .02	4	18.35
837	α^2 Piscium *s.f.*	A2	4.33	4.48	57 54.434	3.1000	+ .0085	+ .0028	+ 2 22 40.45	17.450	.229	− .006	4	18.91
838	BD+14° 328	K0	*7.90*	7.84	58 8.518	3.2506	+ .0152	− .001	+15 6 36.09	17.440	.241	+ .02	5	18.11
839	BD+ 8° 315		9.4		58 18.517	3.1767	+ .0117	− .005	+ 8 57 32.64	17.433	.236	− .03	4	18.77
840	BD+ 3° 277		8.8	8.9	58 32.061	3.1125	+ .0090	− .0017	+ 3 27 43.19	17.423	.231	+ .010	4	19.28

782. $4^{m}83$, $8''3$, 0°. 813. 13^{m}, $6''0$, 122°. 836. $8^{m}8$–$10^{m}0$, $1''7$, 146°. 837. $5^{m}23$, $2''5$, 312°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
841	BD+39° 457		9.4		1 58 57.400	+3.6225	+0.0365	−0.001	+39 40 18.72	+17.405	−0.269	−0.04	7	21.05
842	γ¹ Andromedæ br.	K0	2.28	2.73	58 58.889	3.6686	+ .0395	+ .0042	+41 56 47.55	17.404	.272	− .052	5	17.97
843	BD+66° 182		9.4		59 5.30	4.6590	+ .1327	+ .0033	+67 18 0.47	17.399	.345	− .006	4	19.10
844	Brad 280	A5	5.56	5.79	59 5.387	3.0697	+ .0074	+ .0053	− 0 15 23.84	17.399	.230	+ .025	4	18.37
845	BD+17° 306	A2	*8.63*	8.54	59 5.618	3.2876	+ .0169	+ .002	+17 56 35.13	17.399	.245	.00	4	19.01
846	BD+22° 298	K7	*8.95*	7.92	1 59 9.141	+3.3475	+ .0200	+ .002	+22 29 19.70	+17.397	− .249	− .01	5	19.76
847	Lal 3813	K0	6.51	5.9	59 10.126	2.7733	− .0020	− .0031	−24 16 14.81	17.396	.209	− .024	4	18.93
848	BD+56° 416	A0	*8.60*	8.75	59 12.625	4.0840	+ .0725	+ .002	+56 42 15.53	17.394	.303	− .01	4	18.56
849	BD+73° 113		*9.08*	9.5	59 32.84	5.3618	+ .2282	+ .0116	+73 46 49.88	17.380	.397	− .018	4	19.12
850	BD+48° 595	B9	9.2	9.2	59 38.995	3.8441	+ .0522	− .001	+49 10 35.88	17.375	.286	− .01	4	18.88
851	BD− 5° 382	F5	8.4	7.99	1 59 47.532	+3.0148	+ .0053	− .0024	− 4 57 38.18	+17.369	− .226	− .078	4	19.44
852	BD−19° 369	A0	8.3		59 50.304	2.8429	.0000	+ .0070	−19 0 12.89	17.367	.215	− .123	4	19.45
853	BD−15° 363	G0	9.55		1 59 59.697	2.8956	+ .0015	− .001	−14 50 42.21	17.360	.218	− .05	4	19.49
854	Lal 3833	K5	7.30	7.12	2 0 5.329	2.8568	+ .0004	− .0020	−17 53 50.25	17.356	.215	− .016	4	18.86
855	BD+30° 326	F5	8.31	8.40	0 6.621	3.4639	+ .0263	− .0047	+30 19 31.73	17.355	.260	− .058	4	19.10
856	BD− 7° 351		9.1		2 0 13.678	+2.9914	+ .0045	+ .007	− 6 55 31.52	+17.349	− .226	− .18	4	19.42
857	BD+59° 403	K0	*8.18*	8.28	0 17.326	4.2277	+ .0851	− .003	+59 53 45.64	17.347	.317	− .02	5	20.21
858	BD+16° 237	F8	*8.50*	8.58	1 20.489	3.2825	+ .0166	.000	+17 16 5.89	17.301	.248	− .03	4	17.89
859	BD+32° 376		*9.71*		1 25.603	3.5083	+ .0286	+ .002	+32 49 13.32	17.297	.267	− .01	4	18.40
860	BD+69° 136	G5	*7.82*	8.42	1 35.31	4.8812	+ .1565	− .0025	+69 30 1.21	17.290	.364	+ .009	5	20.49
861	BD+ 4° 348	F5	*8.6*	8.75	2 1 44.216	+3.1310	+ .0098	+ .0014	+ 4 55 25.67	+17.283	− .239	− .008	4	18.21
862	BD−20° 396	F8	*9.63*	ft.	2 6.146	2.8286	− .0001	− .0050	−19 46 39.74	17.267	.217	− .022	4	18.97
863	BD+51° 500	A2	*8.35*	8.71	2 12.766	3.9344	+ .0581	− .0014	+51 44 53.30	17.262	.299	− .014	4	19.05
864	BD+42° 445	B8	*8.43*	7.95	2 20.660	3.7126	+ .0416	+ .003	+43 15 40.07	17.256	.282	+ .01	5	18.85
865	BD+25° 350	G5	7.38	7.1	2 22.313	3.4036	+ .0226	+ .0076	+25 56 29.96	17.255	.260	+ .021	4	18.40
866	CD−29° 718	F0	9.1		2 2 35.943	+2.6856	− .0032	+ .0002	−29 36 24.82	+17.245	− .206	− .080	4	19.46
867	α Arietis	K2	2.23	2.48	2 39.545	3.3632	+ .0205	+ .0137	+23 5 5.33	17.242	.258	− .146	104 86	20.02 20.20
868	BD+61° 383		*9.20*		2 41.80	4.3385	+ .0939	+ .001	+61 41 37.03	17.241	.330	+ .04	4	19.06
869	BD− 9° 403	G5	6.79	6.95	3 4.925	2.9646	+ .0038	+ .004	− 8 59 12.14	17.224	.226	− .01	4	17.84
870	Brad 288	A2	4.77	5.23	3 39.146	3.5991	+ .0338	+ .0127	+37 28 49.11	17.198	.276	− .041	5	20.20
871	BD−11° 408		10.1		2 3 43.026	+2.9409	+ .0031	+ .0013	−10 51 50.00	+17.196	− .227	+ .026	4	18.57
872	BD+10° 292	K5	8.33	7.79	3 50.417	3.2040	+ .0128	− .001	+10 48 37.72	17.189	.248	+ .03	5	18.28
873	BD−21° 379	G0	9.1	8.5	3 55.052	2.8060	− .0005	− .0057	−21 11 27.46	17.186	.217	− .060	4	19.97
874	BD− 2° 366		9.9	8.8	3 56.590	3.0406	+ .0064	− .0016	− 2 40 27.58	17.185	.236	+ .078	4	18.29
875	Brad 256	K0	6.86	6.70	4 20.56	8.8481	+1.0241	+ .0286	+83 11 14.17	17.167	.672	− .031	9	18.53
876	BD− 1° 296	K2	7.70	7.63	2 4 21.894	+3.0631	+ .0073	+ .0016	− 0 47 56.81	+17.166	− .238	+ .021	4	18.63
877	BD+ 7° 335		9.4		4 27.417	3.1636	+ .0111	− .006	+ 7 29 58.50	17.162	.245	+ .01	4 5	18.56 17.64
878	BD+ 1° 375	G5	*8.59*	9.1	4 29.307	3.0914	+ .0083	+ .0054	+ 1 33 1.35	17.160	.241	− .027	4	19.22
879	Lac 638	A5	7.22	6.90	4 31.866	2.7061	− .0026	+ .0055	−27 57 3.49	17.158	.212	− .003	4	19.61
880	BD+53° 459	K5	*8.10*	7.90	4 41.092	4.0231	+ .0641	+ .0003	+53 57 10.93	17.151	.311	− .001	4	18.39
881	BD+27° 337	A0	8.1	8.10	2 4 42.408	+3.4408	+ .0243	− .0007	+28 0 55.64	+17.150	− .267	+ .023	4	19.45
882	BD+23° 288	K0	*9.06*	9.3	4 45.330	3.3797	+ .0211	− .002	+23 55 24.21	17.148	.263	.00	4	19.54
883	β Trianguli	A5	3.08	3.42	4 46.565	3.5504	+ .0305	+ .0123	+34 36 34.48	17.147	.276	− .046	10	19.16
884	BD+54° 470	K2	*8.88*	9.2	4 48.814	4.0583	+ .0670	+ .003	+54 54 50.23	17.147	.314	− .05	5	20.72
885	BD−15° 373		10.3		4 49.873	2.8826	+ .0015	+ .0003	−15 21 8.45	17.145	.226	− .049	4	19.35
886	CD−26° 767	A0	8.9	8.5	2 5 1.029	+2.7327	− .0019	+ .0012	−26 7 13.01	+17.136	− .214	.000	4	19.99
887	BD+48° 614		8.8	9.4	5 16.995	3.8551	+ .0506	+ .002	+48 24 0.42	17.124	.299	− .01	5	20.57
888	BD+17° 318		*9.32*		5 21.988	3.2935	+ .0168	+ .004	+17 37 22.92	17.120	.258	.00	4	19.32
889	CD−23° 790	K2	7.62	7.28	5 22.866	2.7723	− .0011	+ .002	−23 22 7.53	17.120	.217	.00	4	18.84
890	BD+66° 234	G5	*8.25*	8.24	5 27.56	4.6451	+ .1236	− .0048	+66 8 14.68	17.116	.360	+ .010	4	19.62
891	BD+11° 288	G0	*8.89*	8.44	2 5 50.101	+3.2176	+ .0133	.000	+11 44 11.47	+17.099	− .252	− .03	4	18.25
892	15 Arietis	Ma	*5.92*	6.28	6 11.254	3.3151	+ .0178	+ .0062	+19 7 25.05	17.083	.260	− .028	4	19.56
893	BD+34° 390		*9.15*	9.2	6 35.577	3.5564	+ .0305	+ .001	+34 35 51.58	17.064	.279	− .02	4	18.31
894	BD+ 4° 362		*9.0*	9.4	6 45.123	3.1305	+ .0069	+ .0004	+ 4 42 28.36	17.057	.247	+ .014	4	18.46
895	W_1 2^h 33	A0	7.30	7.3	6 52.996	2.9066	+ .0024	− .0016	−13 18 12.74	17.051	.229	+ .003	4	18.39
896	Brad 302	G0	5.74	5.54	2 7 7.525	+3.1741	+ .0116	− .0002	+ 8 11 45.31	+17.040	− .251	− .108	4	18.85
897	BD+62° 294		*9.15*		7 33.96	4.4211	+ .0980	− .008	+62 21 51.27	17.019	.348	+ .02	4	18.60
898	BD+64° 307	A2	7.40	7.30	7 40.01	4.5526	+ .1113	+ .0026	+64 28 49.33	17.015	.350	− .050	5	19.76
899	Brad 301 br.	G0	5.43	5.22	7 43.458	3.4790	+ .0259	− .0048	+29 55 44.10	17.012	.275	− .062	4	18.35
900	BD+58° 399	K0	*7.63*	7.33	7 46.707	4.2412	+ .0810	.000	+58 49 16.65	17.010	.334	− .06	5	18.89

842. 5^{m}08, 9$''$9, 63°.

899. 7^{m}0, 3$''$7, 75°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
901	BD− 5° 404		9.1	8.7	2 7 51.745	+3.0141	+0.0057	+0.0026	− 4 44 22.48	+17.006	−0.240	−0.018	5	19.62
902	BD+67° 189	F0	*7.82*	7.97	7 57.86	4.8035	+ .1386	.0000	+67 45 10.87	17.001	.378	+ .028	4	18.95
903	55 Cassiopeiæ	*	6.15	6.35	8 10.99	4.6766	+ .1240	− .0002	+66 9 1.36	16.990	.369	+ .003	12	19.62
904	Brad 300	K0	5.08	5.0	8 11.744	3.7541	+ .0426	− .0014	+43 51 25.64	16.990	.297	− .007	4	18.55
905	6 Persei	K0	5.40	5.47	8 16.381	3.9394	+ .0557	+ .0365	+50 41 42.05	16.987	.312	− .169	4	18.44
906	CD−29° 767	K0	8.7		2 8 28.269	+2.6735	− .0027	+ .0005	−29 19 55.37	+16.977	− .215	− .005	5	18.80
907	BD+29° 374	G5	7.76	7.75	8 29.915	3.4860	+ .0262	− .0014	+30 11 3.08	16.976	.277	+ .002	4	18.66
908	BD+40° 462	A3	7.52	7.37	8 33.692	3.6781	+ .0375	+ .002	+40 24 57.91	16.973	.293	− .02	7	21.06
909	CD−27° 760	G0	8.7	8.4	8 41.911	2.7099	− .0019	+ .0090	−27 0 51.37	16.967	.218	− .035	4	19.05
910	BD−17° 415	K0	8.9	8.76	8 42.465	2.8583	+ .0012	− .0010	−16 45 57.79	16.966	.229	− .030	4	19.14
911	ξ¹ Ceti	G5	4.54	4.28	2 8 45.414	+3.1788	+ .0117	− .0017	+ 8 28 19.74	+16.964	− .254	− .007	81 65	19.74 19.73
912	BD+ 5° 300		*9.52*		9 9.486	3,1402	+ .0102	+ .0029	+ 5 23 53.49	16.945	.251	+ .018	4	18.57
913	μ Fornacis	A0	5.24	5.11	9 23.152	2.6415	− .0030	+ .0018	−31 5 55.06	16.935	.213	+ .002	4	18.49
914	BD+18° 283	K0	7.10	6.88	9 25.178	3.3223	+ .0178	+ .002	+19 14 25.70	16.932	.266	+ .01	4	18.18
915	BD−10° 453	A2	8.7	8.54	9 37.298	2.9448	+ .0037	+ .0025	−10 7 27.79	16.924	.237	− .143	4	18.54
916	BD+61° 394		*9.08*	ft.	2 9 49.48	+4.4136	+ .0953	− .008	+61 51 40.67	+16.914	− .353	+ .01	4	18.02
917	BD− 7° 381	F8	8.9	8.50	9 54.684	2,9878	+ .0049	.000	− 6 44 56.77	16.910	.241	+ .07	4	19.18
918	BD− 8° 406	G5	8.9	8.3	9 54.825	2.9676	+ .0044	.000	− 8 19 55.93	16.910	.240	− .04	4	19.99
919	BD+49° 602		8.2	8.53	9 56.376	3,9266	+ .0540	− .005	+49 57 14.11	16.909	.315	.00	5	18.80
920	BD+ 7° 351		*9.06*	8.75	9 56.457	3.1693	+ .0113	− .002	+ 7 39 46.89	16.909	.255	− .02	4	19.99
921	BD−18° 385	K0	8.3	8.1	2 10 5.004	+2.8345	+ .0008	+ .0009	−18 20 28.19	+16.902	− .230	+ .011	[illegible]	20.03
922	BD+51° 527	K2	7.26	7.03	10 7.084	3.9971	+ .0593	− .0009	+52 8 19.78	16.901	.320	− .010	[illegible]	19.20
923	BD+70° 167		*9.10*		10 8.73	5.1371	+ .1763	− .0028	+70 48 15.67	16.899	.410	− .015	[illegible]	18.67
924	BD+41° 430		8.0	7.82	10 46.118	3.7248	+ .0398	− .0002	+42 5 45.95	16.870	.300	− .013	4	19.78
925	BD+71° 127	G5	*8.65*	8.99	10 50.81	5.2916	+ .1955	− .0255	+71 58 18.81	16.865	.424	+ .060	4	19.55
926	BD+ 3° 310	F8	*8.57*	8.1	2 10 58.137	+3.1167	+ .0093	− .0017	+ 3 28 49.90	+16.860	− .252	− .076	4	18.66
927	Brad 315	F5	5.64	5.8	11 10.161	3.4052	+ .0217	− .0061	+24 40 22.88	16.851	.276	− .087	4	18.43
928	BD+21° 309	K0	*9.06*	8.91	11 16.538	3.3575	+ .0193	.000	+21 28 1.38	16.846	.272	− .02	4	18.58
929	BD+52° 555	A	*9.18*	8.9	11 44.910	4.0373	+ .0615	+ .003	+53 0 34.98	16.823	.327	.00	4	19.20
930	BD−12° 421	G	9.4		11 47.870	2.9171	+ .0031	+ .003	−12 4 17.79	16.821	.239	+ .05	4 5	18.58 18.67
931	BD+37° 513	A	*9.66*		2 11 58.662	+3.6382	+ .0343	− .004	+37 51 2.80	+16.813	− .296	− .02	5	20.41
932	BD+29° 385	K7	*8.86*	8.1	12 6.747	3.4861	+ .0257	− .0008	+29 34 48.49	16.806	.284	+ .007	4	18.89
933	δ Trianguli	G0	5.07	4.80	12 9.747	3.5616	+ .0298	+ .0926	+33 51 32.18	16.804	.290	− .248	4	18.90
934	BD− 0° 340		9.4		12 11.182	3.0665	+ .0076	+ .0007	− 0 29 27.45	16.803	.251	− .023	4	20.05
935	BD− 2° 388		9.4	9.1	12 16.226	3.0450	+ .0069	− .0015	− 2 10 49.13	16.799	.250	+ .039	4	19.08
936	BD+57° 534	A0	*9.10*		2 12 20.431	+4.2404	+ .0778	− .002	+58° 0 25.41	+16.795	− .345	− .01	5 4	19.10 18.70
937	γ Trianguli	A0	4.07	4.13	12 33.127	3.5558	+ .0294	+ .0034	+33 28 40.78	16.785	.290	− .051	4	18.64
938	67 Ceti	G5	5.70	5.08	12 59.523	2.9855	+ .0051	+ .0061	− 6 47 24.44	16.764	.246	− .108	73 61	19.64 19.94
939	BD+77° 80		*9.10*		13 2.30	6.4684	+ .3778	+ .0041	+77 49 14.70	16.762	.524	− .014	4	19.05
940	BD+74° 106		*8.82*		13 5.50	5.7097	+ .2506	+ .0022	+74 27 44.44	16.759	.464	.000	4	18.49
941	CD−25° 883	G5	8.50	8.3	2 13 14.307	+2.7305	− .0011	+ .0046	−25 0 6.30	+16.752	− .225	+ .027	5	19.54
942	BD−20° 432	F2	8.3	7.68	13 26 781	2.7999	+ .0004	+ .0035	−20 22 1.79	16.742	.231	+ .024	5	18.30
943	θ Arietis	A0	5.69	5.78	13 40.306	3.3338	+ .0181	− .0010	+19 31 54.65	16.731	.275	− .006	4	18.52
944	W1 (1) 2^{h} 144	A5	7.76	7.44	13 46.071	3.2436	+ .0142	− .0011	+13 3 39.59	16.727	.268	− .019	5	18.74
945	Pi 2^{h} 52	F8	5.82	5.56	13 51.931	3.0905	+ .0084	+ .0245	+ 1 22 48.83	16.722	.255	+ .377	5	19.44
946	BD−22° 386	K0	8.9	8.6	2 13 56.291	+2.7670	− .0004	+ .0034	−22 31 24.59	+16.718	− .229	− .017	4	18.28
947	Brad 319	A0	5.12	5.97	14 6.504	3.8645	+ .0479	− .0056	+47 0 41.95	16.710	.318	− .011	[illegible]	18.22
948	BD+48° 648	F0	6.40	6.78	14 9.036	3.9097	+ .0511	− .0103	+48 35 7.68	16.708	.322	+ .056	4	19.20
949	BD−16° 421	K2	8.9	8.36	14 11.390	2.8570	+ .0017	+ .0018	−16 16 50.84	16.706	.237	+ .016	4	19.23
950	BD−14° 423	Mb	8.08	7.43	14 17.902	2.8815	+ .0022	− .0005	−14 30 11.07	16.701	.239	+ .034	4	18.40
951	BD+42° 494		9.5	9.2	2 14 19.652	+3.7691	+ .0416	.000	+43 17 36.72	+16.700	− .311	− .03	6	20.24
952	BD− 5° 429	G0	8.85	8.4	14 24.535	3.0119	+ .0059	+ .0023	− 4 42 9.54	16.696	.250	− .046	4	18.63
953	BD+14° 376		9.48		14 34.972	3.2697	+ .0152	− .002	+14 54 8.05	16.687	.271	+ .01	5	18.70
954	BD+65° 249		*9.00*		14 50.91	4.7063	+ .1200	− .0050	+65 34 52.10	16.674	.388	.000	4	18.18
955	BD+ 1° 412	K0	*7.85*	7.42	15 10.892	3.1025	+ .0089	+ .0001	+ 2 17 50.73	16.658	.257	− .041	4	19.14
956	CD−27° 802	K0	8.02	7.1	2 15 12.690	+2.6970	− .0015	+ .0054	−26 48 31.08	+16.657	− .226	.000	4	18.79
957	BD+35° 454		*9.30*	9.2	15 13.983	3.6049	+ .0316	+ .001	+35 35 33.94	16.656	.300	− .05	5	19.34
958	o Ceti	Md	Var.	3.3	15 18.197	3.0293	+ .0065	− .0001	− 3 20 24.48	16.652	.253	− .237	5	17.94
959	BD+15° 327	K	*9.11*	9.1	15 33.734	3.2845	+ .0158	− .002	+15 52 7.49	16.640	.274	.00	5 4	18.03 19.04
960	BD+20° 376	K0	*9.36*	9.4	15 37.136	3.3608	+ .0191	− .001	+21 7 56.21	16.637	.280	− .01	4	18.54

903. F5 A2.

958. $2^{\mathrm{m}}0$ to $9^{\mathrm{m}}6$.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
961	BD+78° 82	K2	*7.72*	8.04	2 16 19.44	+7.0030	+0.4682	+0.0043	+79 12 46.10	+16.602	−0.580	−0.015	5	19.07
962	BD+58° 455	B0	*8.98*		16 21.765	4.3284	+ .0827	− .004	+59 11 2.78	16.601	.361	.00	5	17.93
963	BD+30° 379	G5	8.21	8.00	16 22.701	3.5106	+ .0263	− .0010	+30 18 31.42	16.600	.294	+ .002	4	18.92
964	BD+40° 487		9.4		16 24.929	3.7247	+ .0382	+ .001	+41 1 49.00	16.598	.312	− .04	4	18.69
965	BD+ 0° 387		*9.49*		16 38.982	3.0863	+ .0083	− .0017	+ 1 2 12.47	16.586	.260	+ .026	4	18.66
966	BD+27° 366	A2	8.8	8.60	2 16 41.824	+3.4669	+ .0241	+ .0018	+27 42 19.18	+16.584	− .292	− .021	4	18.89
967	BD+55° 598	A2	5.22	5.6	16 46.046	4.1646	+ .0689	+ .0006	+55 28 49.41	16.581	.348	.000	4	18.71
968	BD+18° 293		*9.49*		16 53.289	3.3357	+ .0179	− .004	+19 17 9.84	16.575	.280	+ .03	5	18.29
969	BD+11° 323		*9.01*	9.12	16 57.358	3.2238	+ .0132	− .001	+11 21 36.66	16.571	.271	− .03	5	19.69
970	CD−29° 837	K2	9.1	8.0	16 59.170	2.6521	− .0019	+ .0030	−29 13 9.43	16.570	.225	− .020	4	18.30
971	BD+25° 389		*8.85*	9.2	2 17 41.292	+3.4392	+ .0226	+ .0034	+25 52 54.28	+16.535	− .280	+ .003	5	19.17
972	BD− 8° 428	G5	7.52	7.52	17 43.216	2.9678	+ .0047	+ .002	− 7 54 30.38	16.534	.251	− .01	4	18.23
973	BD+39° 533	F0	*8.95*	9.17	17 43.253	3.6948	+ .0362	− .001	+39 28 2.08	16.534	.312	.00	4	18.46
974	BD+ 4° 386	G0	*8.59*	7.88	17 50.168	3.1306	+ .0099	− .0011	+ 4 22 48.06	16.528	.265	+ .072	4	18.28
975	BD+79° 69	A0	8.25	8.52	17 51.70	7.4760	+ .5604	+ .0067	+80 15 21.12	16.527	.623	− .026	5	19.82
976	Brad 335	A5	5.62	5.59	2 18 7.781	+3.0562	+ .0075	− .0018	− 1 14 54.50	+16.513	− .260	− .048	4	17.66
977	BD+64° 325	K2	*8.30*	8.49	18 16.57	4.6540	+ .1113	+ .0126	+64 22 53.83	16.506	.392	+ .024	4	17.95
978	BD− 0° 357	K0	8.6	8.36	18 16.858	3.0704	+ .0079	.0000	− 0 10 17.61	16.506	.262	− .036	4	18.58
979	BD+23° 315	G5	9.8		18 17.058	3.4061	+ .0209	+ .005	+23 43 56.89	16.506	.289	− .02	4	18.16
980	BD+43° 482	G5	*7.77*	7.77	18 17.151	3.8054	+ .0427	+ .006	+44 0 59.98	16.506	.322	− .02	4	18.01
981	Lal 4410	K0	5.99	6.02	2 18 18.813	+2.8259	+ .0013	+ .0005	−18 1 32.42	+16.504	− .241	− .047	4	18.50
982	BD+ 9° 311	F8	*9.30*		18 24.693	3.2083	+ .0127	+ .002	+10 7 58.80	16.499	.272	− .03	4	18.03
983	BD+16° 283	A2	7.26	7.33	18 34.298	3.3084	+ .0166	+ .002	+17 14 2.32	16.491	.282	.00	4	18.02
984	BD+ 7° 375	F0	*7.86*	7.75	18 41.560	3.1820	+ .0117	+ .001	+ 8 10 53.86	16.485	.271	.00	4	18.28
985	BD+57° 559	A0	*9.22*	9.2	18 46.114	4.2601	+ .0755	− .003	+57 21 23.25	16.482	.360	− .03	4	18.34
986	κ Fornacis	F5	5.37	5.2	2 18 52.925	+2.7310	− .0005	+ .0147	−24 10 45.25	+16.476	− .234	− .061	5	19.06
987	BD+59° 483	K0	8.11	7.63	19 31.19	4.4047	+ .0871	− .003	+60 9 18.07	16.444	.374	.00	4	18.34
988	BD−22° 401	K	9.4		19 58.757	2.7604	+ .0001	+ .0012	−22 10 13.97	16.421	.238	+ .016	4	19.02
989	BD+ 4° 390		*9.45*		20 0.110	3.1355	+ .0100	− .0014	+ 4 41 6.45	16.420	.269	− .004	4	18.27
990	BD+28° 409	K0	7.10	6.98	20 0.798	3.4956	+ .0250	+ .0031	+28 52 56.84	16.419	.299	+ .014	5	18.00
991	BD+73° 139	F0	7.22	7.26	2 20 14.88	+5.6402	+ .2252	+ .0183	+73 21 12.43	+16.408	− .479	− .025	4 5	17.88 17.23
992	BD+45° 608	F2	*7.91*	8.30	20 15.724	3.8559	+ .0453	+ .003	+45 34 3.36	16.407	.330	− .02	4	18.03
993	ξ Arietis	B5	5.53	5.63	20 31.580	3.2118	+ .0127	+ .0008	+10 14 56.54	16.394	.276	− .015	8	18.96
994	Lac 726	K0	6.58	5.8	20 44.450	2.6936	− .0009	+ .0005	−26 12 35.89	16.383	.234	+ .010	4	19.20
995	BD+67° 205		*8.90*		20 47.23	4.9891	+ .1436	− .0009	+68 6 9.82	16.381	.426	+ .045	4	18.72
996	BD+18° 303	K0	*7.99*	8.08	2 21 11.583	+3.3415	+ .0178	+ .0031	+19 11 37.37	+16.360	− .288	− .029	4	18.23
997	BD−10° 488 *m.*	F2	8.7	8.3	21 18.148	2.9370	+ .0041	+ .0028	− 9 57 42.14	16.355	.253	+ .030	4	18.95
998	BD+31° 421		*8.16*	7.92	21 24.788	3.5468	+ .0274	+ .0035	+31 31 7.41	16.349	.307	− .001	4	18.50
999	BD+62° 399	K2	8.11	7.91	21 41.65	4.5627	+ .0996	− .001	+62 31 55.18	16.335	.393	− .05	5	17.89
1000	BD+54° 548	K7	*8.42*	8.8	21 46.597	4.1652	+ .0663	+ .003	+54 39 0.83	16.331	.358	− .03	4	18.77
1001	ρ Ceti	A0	4.90	5.02	2 22 5.089	+2.8984	+ .0033	− .0017	−12 39 2.38	+16.315	− .252	− .009	5	17.73
1002	CD−24° 1076	A3	7.79	7.63	22 14.467	2.7234	− .0002	+ .0069	−24 12 10.62	16.307	.237	− .018	4	18.30
1003	BD− 4° 400	F0	9.6	9.2	22 22.760	3.0151	+ .0063	− .0019	− 4 14 13.32	16.300	.263	− .027	4	18.41
1004	ι Cassiopeiae *br.*	A5	4.76	4.74	22 27.06	4.9098	+ .1331	− .0006	+67 2 37.76	16.295	.424	+ .014	12	20.07
1005	BD−14° 455	G0	9.3	8.8	22 36.175	2.8751	+ .0027	+ .005	−14 14 20.04	16.288	.252	− .05	4	18.86
1006	BD+46° 574		9.2		2 22 39.140	+3.9020	+ .0474	+ .007	+46 47 18.83	+16.286	− .339	− .03	4	18.14
1007	BD+22° 348	A3	*9.62*		22 39.906	3.3962	+ .0202	+ .001	+22 32 39.44	16.285	.296	− .01	4	19.20
1008	BD+ 5° 340	F8	8.6	8.02	22 50.884	3.1529	+ .0107	.000	+ 5 52 5.64	16.276	.275	− .03	4	18.70
1009	Lal 4552	K0	6.05	5.99	22 52.084	2.7825	+ .0008	+ .0074	−20 24 16.12	16.275	.244	+ .070	5	20.37
1010	BD+69° 150		*8.85*	8.9	23 16.31	5.2279	+ .1675	− .005	+70 3 23.01	16.254	.453	.00	4	18.60
1011	BD+15° 339	G5	9.4	9.5	2 23 22.984	+3.2937	+ .0158	− .001	+15 45 59.07	+16.249	− .287	+ .01	4 5	17.91 17.32
1012	BD+84° 42	G5	*8.47*	7.97	23 24.40	11.5244	+1.7037	+ .0566	+84 42 33.90	16.247	.991	− .077	4	18.25
1013	Brad 342	F0	5.38	5.45	23 28.204	3.5123	+ .0253	− .0014	+29 18 46.60	16.244	.307	− .087	4	18.57
1014	CD−27° 852	G0	9.2	8.6	23 38.021	2.6703	− .0010	+ .0016	−27 10 45.46	16.236	.236	− .052	4	19.01
1015	BD+41° 467	A0	8.6	8.98	23 40.963	3.7681	+ .0389	− .001	+41 34 27.54	16.233	.329	− .01	4	18.57
1016	BD+60° 490	A2	*8.56*	8.52	2 23 50.39	+4.4656	+ .0892	.000	+60 36 15.26	+16.225	− .389	− .02	5	19.96
1017	BD+ 1° 431	K0	6.49	6.61	23 52.058	3.0947	+ .0086	− .0005	+ 1 36 10.78	16.224	.272	− .010	4	18.10
1018	ξ^2 Ceti	A0	4.34	4.32	23 54.167	3.1845	+ .0117	+ .0026	+ 8 6 7.95	16.222	.280	− .004	88 71	20.05 20.08
1019	BD+35° 480		*9.57*		24 3.630	3.6293	+ .0311	+ .003	+35 18 37.00	16.214	.318	+ .02	4	18.27
1020	BD+26° 416	A2	8.8	8.86	24 13.845	3.4718	+ .0233	− .0004	+26 54 11.13	16.205	.306	+ .040	4	18.45

997. 8^{m}7–12^m, 0″9, 291°.

1004. 7^{m}02, 2″3, 251°, 8^{m}19, 7″5, 113°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1021	BD+23° 330	A2	*8.66*	8.48	2 24 14.234	+3.4149	+0.0208	−0.002	+23 30 46.98	+16.205	−0.301	0.00	4	18.66
1022	CD−29° 889	G5	8.2	7.87	24 25.124	2.6334	− .0014	+ .0021	−29 9 17.79	16.195	.233	− .047	4	18.60
1023	BD+53° 532	G5	*7.80*	7.94	24 27.808	4.1370	+ .0628	+ .003	+53 29 44.99	16.193	.362	− .01	4 5	18.62 17.82
1024	BD−10° 497	A0	8.9	8.5	24 41.067	2.9325	+ .0041	+ .0017	−10 4 58.57	16.182	.259	+ .022	4	18.80
1025	BD− 6° 486	K0	8.4	7.94	25 4.018	2.9924	+ .0058	+ .003	− 5 48 11.50	16.162	.265	− .02	5	19.88
1026	Cape (80) 984	G5	6.14	5.92	2 25 8.647	+2.5888	− .0018	− .0032	−31 27 32.76	+16.158	− .231	− .016	4	20.26
1027	Wi (1) 2^{h} 358 *br.*	K0	6.30	5.7	25 18.860	3.2011	+ .0122	− .0022	+ 9 12 33.22	16.149	.283	.000	4	18.38
1028	BD− 7° 441		10.5		25 33.219	2.9692	+ .0051	+ .003	− 7 26 16.72	16.137	.264	+ .02	5	20.55
1029	BD−16° 450	K0	9.0		25 45.880	2.8388	+ .0022	+ .0030	−16 25 13.17	16.126	.253	+ .007	4	18.36
1030	BD+46° 580		*9.48*	8.9	25 49.002	3.9301	+ .0481	.000	+47 11 52.30	16.123	.348	+ .01	4	19.12
1031	BD+75° 101		*8.75*	9.1	2 25 50.38	+6.2927	+ .3080	− .0019	+76 8 45.03	+16.122	− .552	+ .011	5	19.77
1032	Brad 349	F0	6.14	6.21	26 [illegible].962	3.3545	+ .0180	+ .0050	+19 30 3.23	16.106	.298	− .033	4	18.36
1033	BD+13° 400		*9.26*	9.4	26 12.184	3.2698	+ .0147	− .001	+13 54 22.77	16.103	.291	− .02	5	18.26
1034	BD+ 2° 388		*9.03*	9.2	26 15.956	3.1183	+ .0095	− .0002	+ 3 16 44.73	16.100	.278	− .028	4	18.94
1035	BD+56° 647	B8	*9.00*	9.2	26 21.317	4.2677	+ .0715	− .004	+56 18 43.27	16.095	.378	.00	5	18.24
1036	BD+37° 569		*8.35*	8.57	2 26 22.968	+3.6988	+ .0343	+ .002	+38 9 45.44	+16.094	− .328	− .02	4	18.48
1037	27 Arietis	G5	6.41	6.24	26 27.909	3.3217	+ .0167	+ .0025	+17 21 3.03	16.089	.295	− .097	5	18.72
1038	BD− 0° 378	A2	6.03	6.19	26 39.525	3.0713	+ .0081	− .0044	− 0 5 52.81	16.079	.274	− .053	4	18.35
1039	Brad 350	K0	5.35	5.20	27 12.798	3.6499	+ .0316	+ .0032	+35 47 35.81	16.050	.326	+ .005	4	18.24
1040	BD+49° 686	A0	8.9		27 23.823	4.0086	+ .0526	− .003	+49 25 35.50	16.041	.357	− .02	4	19.28
1041	BD+70° 187		*9.05*		2 27 26.65	+5.4236	+ .1843	+ .0025	+71 10 13.89	+16.038	− .481	+ .018	4	18.92
1042	BD+20° 416	G5	7.55	7.53	27 44.101	3.3772	+ .0189	− .004	+20 45 53.14	16.023	.302	+ .01	5	19.10
1043	BD−18° 433		9.6		27 46.330	2.8064	+ .0017	+ .001	−18 20 30.47	16.021	.253	+ .01	4	18.46
1044	BD+51° 588	A2	6.51	6.66	27 49.127	4.0994	+ .0585	− .0008	+51 57 23.31	16.018	.366	− .007	5	19.23
1045	BD+12° 346	A2	*8.20*	8.49	27 51.164	3.2484	+ .0139	+ .003	+12 20 1.04	16.017	.292	+ .01	4	18.78
1046	BD+ 6° 380	K0	7.8	7.62	2 27 58.823	+3.1624	+ .0109	− .002	+ 6 21 51.33	+16.010	− .284	.00	4	18.36
1047	BD− 1° 353	K0	5.53	5.13	28 4.999	3.0532	+ .0074	− .0017	− 1 23 15.01	16.004	.275	− .031	4	17.73
1048	BD+66° 221		*8.57*	8.7	28 11.45	4.9619	+ .1320	+ .0014	+66 55 4.14	15.999	.443	+ .018	4	19.22
1049	σ Ceti	F5	4.82	4.6	28 17.702	2.8478	+ .0025	− .0055	−15 35 42.71	15.994	.258	− .117	4	18.13
1050	BD+ 0° 421	G5	7.48	7.10	28 35.354	3.0823	+ .0084	− .0014	+ 0 40 51.70	15.978	.277	+ .008	5	19.49
1051	BD−22° 438		9.3		2 28 38.002	+2.7490	+ .0006	+ .0023	−21 51 1.31	+15.975	− .249	− .030	4	18.24
1052	BD+42° 548	F0	8.5	8.85	28 38.466	3.8161	+ .0404	− .002	+42 38 38.12	15.975	.342	− .02	4	17.86
1053	BD+31° 452	K0	7.56	7.37	29 17.924	3.5810	+ .0278	.000	+32 6 3.79	15.940	.323	− .01	4	18.38
1054	BD+62° 421	F5	7.72	7.64	29 25.24	4.6838	+ .1040	− .003	+63 17 5.51	15.934	.421	− .05	4	18.59
1055	BD+16° 306		*9.91*		29 32.726	3.3154	+ .0163	+ .003	+16 39 16.95	15.927	.299	+ .02	4	18.30
1056	Lac 781	K0	5.88		2 29 46.866	+2.5038	− .0021	− .0026	−35 0 4.70	+15.915	− .229	− .020	4	19.75
1057	BD− 3° 400		9.6		29 55.200	3.0222	+ .0067	− .0014	− 3 33 18.36	15.907	.275	+ .004	4	18.20
1058	BD+24° 369	F0	8.26	8.42	30 2.080	3.4443	+ .0214	+ .0063	+24 32 33.77	15.901	.312	− .004	5	19.29
1059	Wi (1) 2^{h} 434	A0	7.00	7.06	30 6.519	3.2347	+ .0133	+ .0019	+11 15 17.09	15.897	.294	− .033	4	17.87
1060	BD−20° 482	F0	9.1	8.6	30 22.774	2.7702	+ .0012	+ .0001	−20 21 18.80	15.883	.252	− .025	5	19.79
1061	BD+44° 534	B9	7.42	7.55	2 30 23.049	+3.8680	+ .0428	− .006	+44 17 25.63	+15.883	− .351	− .01	4	17.94
1062	36 H Cassiopeiæ	K0	5.34	5.40	30 23.51	5.6538	+ .2078	− .0050	+72 28 10.49	15.881	.510	+ .020	9 10	18.44 17.99
1063	CD−25° 1008	K2	8.2	8.60	31 3.957	2.6783	− .0002	+ .0025	−25 43 46.62	15.846	.246	− .015	5	17.73
1064	BD+39° 576		8.5		31 4.758	3.7659	+ .0369	+ .002	+40 15 36.33	15.845	.344	− .01	4	18.42
1065	Pi 2^{h} 115	*	7.34	7.40	31 17.723	4.1071	+ .0575	+ .0007	+51 36 46.29	15.834	.374	− .012	4	18.28
1066	BD−14° 485	K0	8.9		2 31 27.239	+2.8657	+ .0031	+ .005	−14 9 47.89	+15.825	− .263	− .01	4	18.53
1067	BD− 6° 506	G0	8.9	9.1	31 33.689	2.9862	+ .0059	+ .006	− 6 1 6.16	15.820	.274	+ .07	5	18.07
1068	BD+27° 405	K0	*8.89*	8.90	31 35.453	3.5131	+ .0243	− .0015	+28 12 54.29	15.818	.321	− .005	4	17.89
1069	BD+ 3° 361		*9.31*		31 37.386	3.1312	+ .0099	.0000	+ 4 4 26.75	15.816	.287	+ .029	5	19.38
1070	ν Ceti *br.*	G5	5.04	5.0	31 40.407	3.1481	+ .0105	− .0021	+ 5 14 41.51	15.813	.289	− .029	4	17.80
1071	268 G Ceti	K0	5.92	5.92	2 31 41.395	+3.1664	+ .0110	+ .1210	+ 6 30 19.63	+15.813	− .290	+1.460	4	19.19
1072	BD−12° 486	G0	10.1		31 46.074	2.8939	+ .0037	− .0064	−12 16 40.31	15.808	.266	− .075	4	18.20
1073	BD+36° 523	G5	*8.55*	8.32	31 51.939	3.6938	+ .0329	+ .006	+37 4 13.10	15.803	.338	− .02	5	17.47
1074	Brad 365	K5	5.71	5.4	32 3.690	2.9544	+ .0051	− .0025	− 8 10 44.01	15.790	.272	− .066	4	18.29
1075	BD+35° 516		*9.23*		32 22.545	3.6570	+ .0309	+ .003	+35 19 32.83	15.776	.336	− .01	4	17.64
1076	BD+32° 474		*9.12*	9.2	2 32 30.411	+3.5947	+ .0279	+ .001	+32 19 9.17	+15.769	− .330	.00	4	18.30
1077	CD−24° 1157	K0	7.56	6.96	32 53.237	2.7000	+ .0003	+ .0040	−24 16 0.34	15.748	.250	− .024	4	18.61
1078	BD+ 6° 400		9.8		32 55.825	3.1734	+ .0112	.000	+ 6 56 34.08	15.746	.293	+ .05	4	18.34
1079	BD+45° 611	F5	8.2	8.02	32 58.700	3.9210	+ .0452	− .005	+45 43 18.26	15.743	.360	− .04	4	18.19
1080	BD+82° 60	G	*9.00*		32 59.62	9.3518	+ .9110	+ .0368	+82 29 40.43	15.742	.851	+ .012	5	19.40

1027. 11$^{\mathrm{m}}$0, 1$''$6, 138°.

1065. G5, A5.

1070. 10$^{\mathrm{m}}$, 7$''$7, 83°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1081	BD+50° 591	B9	8.47	8.00	2 33 20.382	+4.0752	+0.0546	+0.002	+50 24 56.23	+15.724	−0.375	+0.02	4	18.83
1082	BD+25° 428	K5	*8.76*	8.48	33 20.502	3.4745	+ .0224	+ .0001	+25 51 34.91	15.723	.321	+ .030	4	18.35
1083	BD+19° 391 *m.*	F0	8.6	8.45	33 24.894	3.3697	+ .0182	.000	+19 42 22.25	15.719	.312	+ .01	4	18.47
1084	BD+ 1° 457		*9.21*		33 43.788	3.0996	+ .0089	− .0006	+ 1 51 13.95	15.702	.287	+ .013	4	18.11
1085	BD+ 9° 344		*9.76*		33 43.892	3.2147	+ .0125	+ .004	+ 9 41 57.23	15.702	.298	.00	4	18.85
1086	Oelt 2966	A0	7.28	7.78	2 33 45.40	+4.6523	+ .0977	+ .0007	+62 15 26.80	+15.701	− .428	− .006	4	18.88
1087	BD+29° 448	K0	8.61	8.62	34 3.275	3.5569	+ .0258	+ .0014	+30 11 44.89	15.685	.329	− .052	5	17.79
1088	ν Arietis	A2	5.36	5.56	34 16.172	3.4028	+ .0193	− .0006	+21 36 58.45	15.673	.316	− .023	4	18.03
1089	BD+11° 367		*9.68*		35 17.338	3.2437	+ .0134	+ .004	+11 32 2.71	15.617	.304	+ .05	4	18.11
1090	CD−28° 847	F5	9.1		35 22.621	2.6174	− .0005	+ .0045	−28 30 37.56	15.612	.246	− .048	4	18.69
1091	δ Ceti	B2	4.04	4.23	2 35 22.793	+3.0725	+ .0082	+ .0007	− 0 0 57.19	+15.612	− .288	+ .001	89 74	20.28 20.24
1092	BD+29° 452		*9.18*	9.2	35 34.014	3.5577	+ .0256	− .001	+30 1 43.52	15.602	.332	+ .02	4	19.19
1093	BD+22° 383	F5	*9.47*		35 41.437	3.4222	+ .0199	− .002	+22 35 59.79	15.595	.320	+ .01	4	18.36
1094	ε Ceti	F5	5.01		35 41.584	2.8910	+ .0038	+ .0103	−12 12 39.92	15.595	.272	− .236	4	18.81
1095	Lal 4862	F5	7.18	6.76	35 41.845	4.4501	+ .0799	+ .0030	+58 38 5.01	15.595	.414	− .029	5	19.92
1096	BD−15° 468		10.1	ft.	2 35 52.136	+2.8415	+ .0029	+ .0027	−15 22 59.70	+15.585	− .267	− .013	4	18.61
1097	BD+38° 536 *br.*		*9.00*	8.6	35 57.277	3.7472	+ .0346	+ .006	+38 44 6.32	15.581	.350	+ .06	4	18.48
1098	BD−19° 498	F8	8.9		35 58.283	2.7777	+ .0018	− .0040	−19 19 56.14	15.580	.261	+ .007	5	20.15
1099	BD+20° 443	Ma	*8.09*	8.0	35 59.406	3.3929	+ .0188	+ .002	+20 50 39.69	15.579	.318	+ .01	4	18.69
1100	BD− 9° 500	K0	8.7	8.4	36 2.582	2.9363	+ .0048	.000	− 9 12 43.27	15.576	.276	.00	4	19.02
1101	BD+17° 414	F5	7.8	8.22	2 36 4.559	+3.3502	+ .0172	− .002	+18 15 21.36	+15.574	− .314	+ .03	5	17.97
1102	Brad 344	K0	5.92	5.68	36 8.83	8.4545	+ .6736	+ .0087	+81 6 40.98	15.570	.783	− .069	9	19.40
1103	Lal 4976	A2	7.30	7.41	36 14.838	2.8208	+ .0025	+ .0024	−16 39 7.19	15.564	.265	+ .002	5	17.61
1104	BD+15° 367	K2	8.49	8.4	36 15.245	3.3038	+ .0155	+ .004	+15 20 37.53	15.564	.311	− .05	4	18.78
1105	BD− 1° 375		9.0		36 31.768	3.0577	+ .0078	− .0005	− 1 1 10.14	15.549	.288	− .010	4	18.42
1106	BD+13° 430		*10.11*		2 36 50.907	+3.2776	+ .0145	+ .002	+13 37 45.62	+15.531	− .308	+ .01	4	18.77
1107	BD−22° 460	G0	8.3		36 59.177	2.7325	+ .0011	− .0017	−21 55 2.36	15.524	.258	− .185	4	18.57
1108	BD+57° 616	G0	*8.10*	8.01	37 2.934	4.4187	+ .0767	− .010	+57 51 23.61	15.520	.414	− .02	4	18.75
1109	BD+ 7° 412	K0	*7.86*	7.42	37 7.797	3.1944	+ .0118	− .001	+ 8 11 8.99	15.516	.301	− .03	4	18.72
1110	12 Persei	G0	4.99	5.23	37 11.494	3.7793	+ .0361	− .0012	+39 51 23.51	15.512	.356	− .191	4	17.98
1111	BD−14° 507	G0	8.9		2 37 38.319	+2.8636	+ .0034	− .0001	−13 50 46.73	+15.488	− .271	− .045	4	18.22
1112	Grmb 543 *br.*	G5	6.56	6.35	37 39.202	4.0125	+ .0490	.0000	+47 55 28.41	15.487	.378	+ .006	4	19.23
1113	BD+33° 493	A2	*8.66*	8.43	37 43.588	3.6330	+ .0288	+ .002	+33 25 35.61	15.483	.343	− .03	4	17.98
1114	Brad 366	A2	5.84	5.81	37 55.21	5.1225	+ .1371	+ .0037	+67 29 9.04	15.471	.481	− .028	12	20.32
1115	BD+63° 357	A2	*9.13*		38 33.77	4.7929	+ .1059	− .004	+63 38 12.74	15.436	.452	− .02	4	19.15
1116	BD−11° 507	K0	9.1	8.71	2 38 37.661	+2.9047	+ .0043	.0000	−11 8 1.30	+15.432	− .278	.000	4	18.57
1117	θ Persei	F8	4.22	4.1	38 43.509	4.0505	+ .0510	+ .0343	+48 53 28.13	15.427	.384	− .001	4	18.85
1118	35 Arietis	B3	4.58	4.60	38 45.105	3.5145	+ .0234	+ .0003	+27 22 3.29	15.425	.334	− .013	4	19.86
1119	Brad 376	G5	5.58	5.33	38 52.082	3.8961	+ .0419	.0000	+43 57 27.96	15.419	.369	− .004	4	18.82
1120	BD+39° 618	G5	9.1	8.63	38 59.651	3.7787	+ .0356	+ .0074	+39 33 50.80	15.412	.358	− .010	5	19.71
1121	BD+23° 362	K0	7.77	7.31	2 39 1.373	+3.4485	+ .0206	+ .001	+23 44 1.87	+15.410	− .328	− .01	4	18.72
1122	BD− 4° 456		10.1		39 1.449	3.0037	+ .0066	+ .0022	− 4 36 53.64	15.410	.286	+ .012	4	19.50
1123	BD+67° 226	A2	*8.50*	8.7	39 4.31	5.1335	+ .1369	− .0012	+67 28 14.95	15.408	.485	− .015	4	19.03
1124	γ^{1} Ceti *br.*	A2	3.69	4.00	39 9.225	3.1160	+ .0095	− .0098	+ 2 53 57.97	15.403	.298	− .150	5 4	18.66 19.30
1125	BD− 7° 474	K0	7.8	7.28	39 9.374	2.9680	+ .0057	+ .004	− 6 58 53.72	15.403	.284	− .02	4	19.14
1126	BD+54° 602	A0	*8.70*	8.7	2 39 15.431	+4.2778	+ .0655	+ .002	+54 37 34.49	+15.397	− .406	+ .01	4	19.02
1127	BD+65° 289	B8	Var.	8.31	39 15.59	4.9407	+ .1184	+ .0045	+65 23 19.15	15.397	.468	+ .020	4	19.75
1128	BD−17° 524	F8	9.4		39 21.235	2.8065	+ .0025	+ .002	−17 16 34.27	15.392	.268	− .04	4	18.76
1129	CD−28° 870	G0	6.83	7.00	39 21.886	2.6080	− .0002	+ .0005	−28 29 28.11	15.391	.250	− .020	5	18.35
1130	W1 (1) 2^{h} 624	K0	6.64	6.44	39 26.108	3.0298	+ .0071	+ .0024	− 2 52 16.29	15.387	.289	+ .025	4	19.02
1131	BD−15° 486	A	9.9	ft.	2 40 4.100	+2.8408	+ .0032	+ .0047	−15 6 16.30	+15.351	− .273	− .019	4	18.86
1132	π Ceti	B5	4.39	4.5	40 18.849	2.8550	+ .0034	− .0005	−14 11 48.74	15.338	.274	− .014	4	17.74
1133	μ Ceti	F0	4.36	4.39	40 36.882	3.2212	+ .0125	+ .0100	+ 9 46 37.76	15.321	.310	− .027	74 63	20.37 20.63
1134	Lac 850	G0	6.87	7.01	40 41.212	2.6553	+ .0004	+ .0112	−25 50 4.77	15.317	.260	+ .054	4	18.99
1135	BD+46° 630	F2	9.2	9.30	41 3.364	3.9772	+ .0458	.000	+46 19 18.16	15.296	.381	.00	5	18.11
1136	BD+ 7° 421	G5	8.6	8.9	2 41 6.278	+3.1851	+ .0114	+ .002	+ 7 24 54.92	+15.293	− .307	+ .04	4	18.15
1137	BD− 9° 523	K	9.46	9.3	41 24.433	2.9253	+ .0048	.0000	− 9 40 6.52	15.276	.283	− .019	5	19.34
1138	BD+25° 449	K0	8.11	7.70	41 34.468	3.4824	+ .0217	+ .0180	+25 19 0.85	15.267	.336	− .180	5	19.58
1139	Brad 373	A0	Var.	6.43	41 41.15	5.3657	+ .1572	− .0007	+69 17 56.40	15.260	.514	+ .018	9	19.62
1140	W1 (2) 2^{h} 915	G5	6.88	6.53	42 1.305	3.0952	+ .0309	+ .0034	+35 38 53.23	15.241	.356	− .017	4	18.11

1083. $9^{m}3$–$9^{m}3$, 0″2, 286°.
1097. 14^{m}, 5″0, 247°.
1112. $11^{m}2$, 5″7, 153°.
1124. $6^{m}16$, 3″3, 294°.
1127. $8^{m}3$ to $9^{m}0$.
1139. $6^{m}4$ to $7^{m}8$.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1141	BD+ 4° 439	F8	8.06	7.97	2 42 1.632	+3.1526	+0.0104	+0.0048	+ 5 15 27.46	+15.241	−0.305	−0.043	4	18.14
1142	BD+62° 468	B9	*8.44*	8.01	42 25.15	4.7759	+ .1011	− .008	+62 56 56.05	15.219	.460	− .02	4	18.19
1143	BD+33° 509		*9.66*		42 25.811	3.6565	+ .0292	+ .001	+33 52 12.47	15.217	.354	.00	4	18.77
1144	BD+11° 385	A0	*7.59*	7.77	42 31.803	3.2565	+ .0136	.000	+11 55 32.72	15.212	.315	− .03	4	18.38
1145	BD+21° 374	G5	*8.47*	8.68	42 33.208	3.4291	+ .0195	− .001	+22 16 7.73	15.211	.332	.00	4	18.78
1146	BD−19° 521	F0	9.1	8.30	2 42 46.985	+2.7687	+ .0020	+ .0012	−19 13 51.48	+15.198	− .270	+ .008	5	19.65
1147	CD−23° 1058		10.4	ft.	43 6.514	2.6919	+ .0011	.000	−23 34 14.04	15.179	.263	− .22	4	18.76
1148	Lal 5196	F5	6.49	6.59	43 6.975	2.7205	+ .0014	+ .0054	−21 58 30.10	15.179	.265	+ .021	4	19.20
1149	39 Arietis	K0	4.62	4.90	43 8.401	3.5549	+ .0244	+ .0115	+28 54 56.50	15.178	.345	− .125	5	19.39
1150	BD+47° 701	A0	*8.73*	8.70	43 18.186	4.0400	+ .0486	− .007	+47 54 40.39	15.168	.391	+ .02	4	18.56
1151	BD+40° 602		9.4	8.2	2 43 20.558	+3.8229	+ .0368	− .001	+40 38 44.32	+15.166	− .371	− .02	6	20.14
1152	BD− 3° 438		9.6		43 32.666	3.0282	+ .0072	+ .0086	− 2 54 58.91	15.154	.295	+ .064	4	18.94
1153	BD+ 9° 363		*9.56*		43 41.341	3.2311	+ .0127	+ .005	+10 15 13.10	15.146	.315	+ .06	5	17.24
1154	BD+ 3° 385		*9.45*		43 47.176	3.1250	+ .0097	− .0003	+ 3 25 0.57	15.140	.304	− .003	4	18.55
1155	CD−25° 1106	F5	9.9		43 54.842	2.6512	+ .0007	+ .0028	−25 41 16.81	15.133	.260	+ .010	4	19.04
1156	BD+53° 576	B3	*8.92*	9.3	2 43 59.170	+4.2616	+ .0621	− .001	+53 35 41.20	+15.129	− .414	+ .01	4	18.54
1157	Brad 393	K0	6.04	5.66	44 2.740	3.3568	+ .0169	+ .0026	+17 57 4.58	15.126	.328	− .035	4	18.35
1158	Lal 5220	Mb	Var.	6.7	44 5.932	2.8735	+ .0040	− .0008	−12 47 35.77	15.123	.281	− .032	4	19.06
1159	BD+31° 483	A2	*9.01*	8.97	44 21.812	3.6169	+ .0270	+ .0029	+31 46 48.99	15.107	.354	− .033	4	18.97
1160	BD+14° 471	G0	*8.36*	8.34	44 22.262	3.2963	+ .0148	+ .003	+14 16 51.17	15.107	.323	− .03	4	18.95
1161	BD+78° 99		*8.40*	8.6	2 44 30.64	+7.4900	+ .4443	− .0027	+78 44 40.74	+15.099	− .725	+ .006	5	18.88
1162	η Persei *br.*	K0	3.95	3.83	44 50.867	4.3569	+ .0679	+ .0029	+55 33 52.23	15.080	.425	− .016	4	18.48
1163	41 Arietis	B8	3.68	4.10	45 16.202	3.5209	+ .0228	+ .0050	+26 55 53.65	15.055	.346	− .113	16 15	23.33 23.42
1164	BD−11° 529 *n.pr.*	G0	8.6	7.9	45 26.944	2.9030	+ .0045	+ .0059	−10 52 52.85	15.045	.286	− .040	4	18.44
1165	BD−15° 498	K0	8.8		45 30.661	2.8355	+ .0033	+ .0075	−15 1 53.79	15.041	.280	− .036	4	18.40
1166	BD+ 0° 469	G5	7.08	6.86	2 45 30.952	+3.0818	+ .0085	+ .0020	+ 0 35 23.87	+15.041	− .303	− .021	4	18.53
1167	BD+85° 50	A0	*8.67*		45 41.60	14.416	+2.411	− .024	+85 32 34.49	15.031	1.396	+ .005	4	17.96
1168	β Fornacis	K0	4.50		45 44.546	2.5041	− .0005	+ .0079	−32 44 29.07	15.028	.248	+ .160	5	20.20
1169	BD+13° 456	F5	*8.41*	7.88	45 49.518	3.2832	+ .0143	+ .004	+13 22 46.78	15.023	.323	− .01	4	17.90
1170	BD+52° 638	K0	*9.50*		46 23.850	4.2480	+ .0601	− .001	+52 57 3.75	14.990	.418	+ .02	5 4	17.88 18.92
1171	BD+44° 591	K5	7.8	8.05	2 46 25.629	+3.9517	+ .0427	+ .0026	+44 43 48.38	+14.988	− .388	.000	4	17.41
1172	BD+61° 492		*8.84*	9.4	46 34.42	4.6950	+ .0914	− .004	+61 18 20.07	14.980	.461	− .02	4	18.83
1173	BD− 7° 508		9.9		47 2.106	2.9670	+ .0059	+ .004	− 6 46 21.49	14.953	.294	− .01	4	17.93
1174	σ Arietis	B5	5.46	5.32	47 4.339	3.3071	+ .0150	+ .0021	+14 45 11.88	14.950	.327	− .033	71 61	19.37 19.67
1175	BD+36° 582	K0	7.08	6.80	47 11.115	3.7382	+ .0319	− .001	+36 45 56.52	14.944	.369	− .02	5	19.95
1176	BD+ 2° 438 *m.*	F2	*7.66*	7.07	2 47 11.308	+3.1151	+ .0094	− .0012	+ 2 43 39.08	+14.944	− .309	− .018	4	18.52
1177	BD+29° 489	A0	8.26	8.10	47 19.903	3.5914	+ .0254	+ .0015	+30 11 43.78	14.936	.355	− .021	4	17.97
1178	BD− 1° 398	F2	8.0	7.28	47 21.696	3.0569	+ .0079	+ .0035	− 1 1 2.96	14.934	.303	+ .045	4	18.37
1179	BD+65° 304	A0	*8.47*	8.8	47 22.89	5.0637	+ .1215	+ .0015	+65 52 42.45	14.933	.499	+ .005	4	18.59
1180	τ^2 Eridani	K0	4.81	5.11	47 24.554	2.7245	+ .0018	− .0037	−21 19 59.24	14.931	.271	− .012	4	19.04
1181	BD+15° 397	K5	8.4	8.34	2 47 25.338	+3.3312	+ .0157	− .002	+16 10 8.94	+14.930	− .330	− .03	4	18.52
1182	BD+26° 476	A5	*8.46*	8.48	47 27.346	3.5224	+ .0226	+ .0029	+26 45 24.57	14.928	.350	.000	4	18.86
1183	BD+76° 97		*8.92*		47 49.27	7.0091	+ .3552	− .0036	+77 12 45.70	14.907	.689	+ .012	4	19.20
1184	BD−17° 554	K0	8.06	7.81	48 6.437	2.7893	+ .0027	+ .0027	−17 34 46.40	14.890	.278	+ .034	4	18.89
1185	BD+19° 430	G5	*8.98*	8.7	48 14.659	3.3950	+ .0179	+ .002	+19 47 50.82	14.882	.339	.00	4	18.71
1186	Lac 903	F 2	6.38	5.8	2 48 33.023	+2.5309	− .0001	+ .0100	−31 8 42.55	+14.864	− .254	+ .095	4	19.49
1187	BD+12° 402		9.4		48 34.447	3.2739	+ .0138	− .001	+12 38 35.54	14.863	.326	− .01	4	18.52
1188	τ Persei	*	4.06	4.12	48 34.459	4.2386	+ .0584	+ .0005	+52 26 10.09	14.863	.420	− .006	4	18.05
1189	BD+56° 740	A7	*9.62*		48 49.281	4.4186	+ .0700	− .006	+56 17 43.27	14.848	.438	+ .01	4	18.82
1190	BD+ 4° 454	G	9.10		48 54.299	3.1528	+ .0103	− .0004	+ 5 5 52.91	14.843	.315	− .041	4	18.54
1191	BD−19° 550	K5	9.4	8.6	2 49 3.100	+2.7672	+ .0025	− .0006	−18 46 24.73	+14.835	− .277	− .018	4	19.31
1192	CD−27° 1007	F8	8.5	8.2	49 6.114	2.6137	+ .0007	+ .0173	−27 2 54.29	14.832	.263	− .110	4	18.79
1193	BD+42° 647	K2	8.2	7.60	49 26.833	3.8941	+ .0389	− .003	+42 22 18.98	14.812	.389	− .01	6	19.37
1194	BD+ 8° 443	Mb	6.82	7.16	49 28.275	3.2155	+ .0121	+ .005	+ 9 0 36.14	14.810	.322	+ .01	4	18.50
1195	BD+32° 528		*9.36*		50 2.650	3.6519	+ .0275	+ .003	+32 40 39.14	14.776	.366	− .01	4	19.19
1196	BD+46° 655	A0	*8.78*	8.4	2 50 6.350	+4.0431	+ .0465	− .002	+47 8 7.55	+14.773	− .405	− .01	4	19.31
1197	BD−11° 546	F5	6.92	7.21	50 14.918	2.9008	+ .0048	− .0022	−10 46 4.07	14.764	.292	.000	4	18.73
1198	BD+37° 660	G5	*8.52*	8.07	50 22.151	3.7711	+ .0329	− .001	+37 40 29.82	14.757	.378	+ .01	4	18.76
1199	Grmb 569	G5	7.92	7.72	50 22.77	5.9154	+ .2040	+ .0065	+72 21 2.88	14.756	.591	− .021	8	19.32
1200	Wi (1) 2ʰ 821	K0	7.30	7.10	50 39.822	2.9830	+ .0063	+ .0005	− 5 39 18.85	14.740	.301	− .040	4	19.36

1158. $6^{\mathrm{m}}4$ to $7^{\mathrm{m}}7$.
1162. $8^{\mathrm{m}}5$, 28″, 300°.
1164. $9^{\mathrm{m}}8$, $2\overset{\prime\prime}{.}5$, 157°.
1176. $8^{\mathrm{m}}4$–$8^{\mathrm{m}}4$, $0\overset{\prime\prime}{.}2$, 32°.
1188. G0, A5.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1201	BD−21° 517	A2	8.1	7.3	2 50 49.168	+2.7203	+0.0020	−0.0026	−21 14 57.77	+14.730	−0.276	−0.016	4	19.45
1202	BD+22° 405	K7	*8.78*	9.3	50 53.659	3.4503	+ .0195	− .001	+22 36 37.29	14.726	.347	+ .01	4	18.09
1203	BD+59° 571	G0	*9.14*		51 2.64	4.6482	+ .0848	+ .005	+60 3 48.48	14.717	.466	− .02	4	19.13
1204	BD− 8° 547	G5	8.4	8.48	51 12.802	2.9399	+ .0055	+ .013	− 8 19 11.47	14.707	.297	− .02	4	19.27
1205	BD+50° 667	K5	*8.56*	8.42	51 13.565	4.1733	+ .0535	+ .001	+50 28 24.98	14.706	.420	− .01	4	18.88
1206	Wi (1) 2h 824	A0	7.70	7.92	2 51 15.409	+3.3056	+ .0147	− .0028	+14 23 0.16	+14.704	− .334	− .018	5	19.39
1207	BD− 1° 414	F5	8.6	8.9	51 22.368	3.0602	+ .0081	+ .0015	− 0 47 31.40	14.698	.309	− .029	4	19.02
1208	CD−30° 1097	F2	9.13	ft.	51 23.625	2.5490	+ .0002	+ .0038	−29 57 11.75	14.696	.258	− .014	5 4	19.06 20.15
1209	BD+48° 803	F5	7.75	7.82	51 25.419	4.0958	+ .0490	+ .001	+48 22 52.33	14.694	.413	+ .03	4	18.49
1210	BD−15° 517		10.8	ft.	51 28.322	2.8311	+ .0035	+ .0043	−14 52 52.76	14.692	.287	+ .058	4	19.77
1211	BD−12° 555	F8	8.9		2 51 47.076	+2.8679	+ .0042	+ .0010	−12 40 36.15	+14.673	− .291	.000	4	18.96
1212	BD+17° 458	F5	5.57	5.64	51 54.911	3.3635	+ .0165	+ .0189	+17 42 18.41	14.665	.340	− .207	5	18.17
1213	Brad 410	F8	6.08	6.35	51 56.854	3.2017	+ .0116	+ .0045	+ 8 3 37.89	14.663	.325	− .091	4	18.58
1214	BD+67° 237	G5	*8.65*	9.4	52 10.29	5.2501	+ .1333	+ .0045	+67 16 15.77	14.650	.529	− .042	4	18.86
1215	BD+33° 546		*8.60*	8.40	52 17.788	3.6800	+ .0283	+ .003	+33 38 18.64	14.642	.373	− .02	4	18.71
1216	BD+68° 211		*8.75*	8.4	2 52 22.67	+5.4339	+ .1504	− .0024	+68 51 36.77	+14.638	− .547	− .005	4	19.41
1217	η Eridani	K0	4.05	3.85	52 31.085	2.9245	+ .0052	+ .0054	− 9 12 56.90	14.629	.298	− .215	76 65	19.49 19.73
1218	CD−24° 1321	K0	8.5	8.54	52 50.562	2.6533	+ .0013	+ .0020	−24 37 34.00	14.610	.271	− .008	4	17.71
1219	Wi (1) 2h 864	Ma	6.31	6.35	52 52.969	3.1396	+ .0100	+ .0012	+ 4 10 43.12	14.607	.319	+ .004	4	17.79
1220	CD−23° 1131	G5	8.3		53 17.191	2.6777	+ .0016	+ .0047	−23 18 28.34	14.583	.275	+ .020	4	18.93
1221	BD+ 6° 453		9.4		2 53 24.036	+3.1830	+ .0111	+ .002	+ 6 51 28.38	+14.576	− .325	− .01	4 5	18.69 18.97
1222	Brad 412	F0	5.85	5.75	53 30.189	3.4131	+ .0180	+ .0156	+20 20 55.40	14.570	.348	− .031	4	18.83
1223	π Persei	A2	4.62	5.53	53 38.296	3.8255	+ .0345	+ .0033	+39 20 36.78	14.562	.389	− .050	6	19.87
1224	BD+34° 548		*9.46*		53 43.693	3.7219	+ .0298	− .002	+35 14 42.07	14.557	.379	− .24	4	19.13
1225	BD+62° 503		*9.72*		53 54.41	4.8684	+ .0993	+ .010	+62 53 6.41	14.546	.495	+ .02	4	19.05
1226	BD− 2° 526	A2	8.2	7.84	2 53 56.924	+3.0300	+ .0074	+ .0006	− 2 39 25.37	+14.543	− .310	+ .003	4	18.46
1227	BD+54° 630	K0	*8.25*	8.93	54 12.875	4.3553	+ .0631	+ .004	+54 19 27.86	14.527	.444	− .04	5	17.85
1228	BD+10° 396		*9.90*		54 27.001	3.2508	+ .0129	+ .004	+10 56 1.00	14.513	.333	.00	5	18.26
1229	BD+28° 479	A7	*9.77*		54 34.038	3.5761	+ .0238	+ .0012	+28 37 44.47	14.506	.365	− .031	4	19.32
1230	ε Arietis *m.*	A2	4.64	5.38	54 37.966	3.4272	+ .0184	− .0011	+21 1 16.40	14.502	.351	− .008	4	18.04
1231	ε Arietis *n. f.*	A2	5.25	5.31	2 54 38.026	+3.4272	+ .0184	− .0011	+21 1 16.60	+14.502	− .351	− .008	4	18.18
1232	BD+49° 817	A2	*8.88*	8.8	54 43.206	4.1593	+ .0513	− .002	+49 39 21.15	14.497	.425	+ .02	4	18.48
1233	BD+44° 609	G0	*9.35*	8.7	54 55.966	3.9907	+ .0422	+ .004	+44 49 6.72	14.484	.408	− .01	4	19.13
1234	BD+ 0° 490	A0	*8.77*	8.81	55 9.364	3.0877	+ .0087	+ .0018	+ 0 55 33.28	14.471	.318	+ .005	4	19.00
1235	BD+26° 496	K2	8.6	8.45	55 14.287	3.5354	+ .0222	+ .0027	+26 34 14.93	14.466	.363	+ .005	4	19.43
1236	BD− 6° 579 *n. pr.*		9.0		2 55 18.713	+2.9662	+ .0061	+ .008	− 6 33 46.14	+14.461	− .305	+ .01	4	18.88
1237	47 H Cephei *br.*	Ma	5.72	5.53	55 23.20	7.8819	+ .4685	− .0131	+79 6 15.83	14.457	.802	+ .011	8	19.32
1238	λ Ceti	B5	4.69	4.69	55 25.447	3.2126	+ .0118	+ .0006	+ 8 35 22.06	14.454	.331	− .006	4	20.07
1239	BD+24° 419	A2	*8.68*	8.68	55 30.075	3.5032	+ .0209	− .0017	+24 55 41.19	14.450	.360	− .016	4	18.24
1240	BD− 4° 511	F8	7.75	7.94	55 32.962	3.0009	+ .0068	+ .0145	− 4 26 3.88	14.447	.310	− .023	4	19.03
1241	Lac 946	G5	6.19	6.0	2 55 42.075	+2.5541	+ .0007	+ .0010	−29 13 28.28	+14.437	− .265	− .027	4	18.69
1242	BD+55° 737	A5	*8.88*	8.91	55 47.024	4.4327	+ .0672	+ .002	+55 42 35.47	14.432	.455	− .02	4	18.87
1243	BD−16° 543	K0	8.3	7.83	56 20.611	2.7993	+ .0033	+ .0043	−16 23 6.41	14.398	.290	+ .040	4	19.04
1244	BD+12° 422	K5	8.4	8.62	56 22.911	3.2817	+ .0137	+ .002	+12 40 5.30	14.396	.339	− .01	4	18.95
1245	BD+ 5° 436	K5	8.96	8.7	56 42.793	3.1584	+ .0105	+ .0003	+ 5 15 30.69	14.376	.327	− .039	4	18.72
1246	BD+19° 446		9.33		2 56 50.580	+3.4094	+ .0176	.000	+19 51 58.67	+14.368	− .353	− .02	4	18.52
1247	BD+30° 479		9.1	9.2	57 19.201	3.6265	+ .0253	+ .0005	+30 40 16.78	14.339	.375	+ .007	4	17.74
1248	BD− 8° 564		9.3	9.1	57 26.018	2.9293	+ .0054	.000	− 8 43 26.59	14.332	.305	− .01	4	18.97
1249	BD+58° 551	G5	*7.52*	7.94	57 26.467	4.6360	+ .0798	− .010	+59 8 3.38	14.331	.479	+ .05	5	17.92
1250	BD+10° 402 *n. f.*		8.6	8.6	57 28.271	3.2465	+ .0127	+ .001	+10 32 14.23	14.330	.337	.00	5	19.66
1251	BD+40° 653	K0	*8.65*	8.57	2 57 37.808	+3.8840	+ .0363	+ .001	+40 56 39.05	+14.320	− .402	− .04	4	18.90
1252	BD+82° 76	G5	7.21	7.12	57 39.65	10.2695	+ .9383	+ .0124	+82 35 45.13	14.319	1.053	− .007	4	18.76
1253	BD+37° 688	A2	8.7	9.35	57 40.942	3.7985	+ .0322	.000	+37 37 6.04	14.317	.393	− .01	4	19.10
1254	BD+69° 195		*9.18*		58 2.23	5.6801	+ .1671	− .0002	+70 14 14.71	14.295	.586	+ .009	4	19.18
1255	α Ceti	Ma	2.82	2.82	58 5.724	3.1346	+ .0008	− .0009	+ 3 46 36.27	14.291	.327	− .077	45 38	18.66 18.85
1256	BD+33° 562	G0	*8.49*	8.3	2 58 7.603	+3.6953	+ .0280	+ .001	+33 35 56.13	+14.289	− .384	.00	4	19.11
1257	BD+23° 395	K0	*9.16*	9.15	58 12.282	3.4799	+ .0198	+ .0017	+23 28 41.17	14.285	.362	− .014	4	19.04
1258	Lal 5647	F0	7.40	8.05	58 21.973	2.7584	+ .0028	− .0011	−18 31 18.16	14.275	.288	− .030	4	18.86
1259	BD+47° 760	F0	6.62	6.63	58 27.444	4.0982	+ .0467	.000	+47 32 7.59	14.269	.425	+ .01	4	19.12
1260	BD+57° 683	F0	*8.85*	8.48	58 29.673	4.5337	+ .0723	+ .002	+57 16 40.30	14.267	.471	+ .01	4	18.96

1230. 5m25, 5m55, 1″4, 203°.
1231. 5m55, 1″4, 203°.

1236. 9m7, 3″7, 131°.
1237. 9m9, 1″7, 230°.

1250. 8m8, 20″, 200°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1261	BD+16° 382		*10.12*		2 58 44.627	+ 3.3547	+0.0158	+0.002	+16 42 1.74	+14.252	−0.349	−0.02	4	19.31
1262	BD+72° 156	A0	*8.55*	8.9	58 48.48	6.0568	+ .2053	− .0071	+72 30 53.83	14.248	.627	+ .016	4	18.76
1263	τ³ Eridani	A3	4.16	4.5	58 51.897	2.6553	+ .0016	− .0104	−23 56 14.89	14.243	.278	− .047	4	19.69
1264	BD−21° 544	K0	9.9		58 57.428	2.7156	+ .0023	+ .0055	−20 47 21.29	14.238	.284	− .007	4	18.16
1265	γ Persei	*	3.08	2.9	58 59.475	4.3300	+ .0593	+ .0004	+53 11 39.19	14.236	.450	− .009	4	19.22
1266	BD+45° 700	G5	9.0	8.6	2 59 25.436	+ 4.0496	+ .0439	− .005	+46 1 32.73	+14.209	− .423	.00	5	18.13
1267	BD+52° 656	A0	*7.98*	8.31	3 0 2.272	4.2998	+ .0571	− .001	+52 23 45.43	14.172	.449	− .02	4	19.19
1268	ρ Persei	Mb	Var.	3.35	0 2.557	3.8253	+ .0331	+ .0115	+38 31 52.70	14.171	.401	− .108	4	18.91
1269	BD+15° 430	K0	6.59	6.36	0 13.346	3.3358	+ .0151	− .0009	+15 32 47.95	14.160	.351	− .121	4	18.20
1270	BD−11° 583	F5	9.3		0 18.367	2.8928	+ .0049	.0000	−10 45 55.08	14.155	.305	+ .026	4	18.95
1271	BD−22° 538	K0	9.6		3 0 21.602	+ 2.6865	+ .0022	+ .0020	−22 12 3.36	+14.152	− .285	− .030	4	19.53
1272	BD+32° 561		*9.59*		0 38.604	3.6895	+ .0273	+ .003	+33 3 31.09	14.134	.388	− .02	4	19.22
1273	BD+75° 127	A0	7.62	7.66	0 49.96	6.8181	+ .2924	− .0076	+75 47 26.40	14.123	.711	+ .021	4	18.62
1274	BD− 0° 491		9.4		0 52.597	3.0631	+ .0082	+ .0044	− 0 34 54.83	14.120	.323	+ .028	4	18.96
1275	BD−12° 590	F5	8.2	8.6	1 0.360	2.8626	+ .0045	+ .0026	−12 28 51.17	14.112	.302	− .069	4	18.74
1276	BD+63° 391	G5	*8.70*		3 1 4.14	+ 5.0296	+ .1060	− .0064	+64 7 17.66	+14.108	− .527	− .030	5	20.70
1277	BD+ 0° 511	F5	*8.59*	8.05	1 7.976	3.0817	+ .0085	+ .0021	+ 0 32 35.76	14.104	.325	− .027	4	18.50
1278	BD+61° 523		*8.35*	8.5	1 26.18	4.8577	+ .0927	.000	+61 57 21.61	14.085	.510	+ .02	4	18.97
1279	BD+20° 505	G0	*8.50*	8.68	2 3.546	3.4260	+ .0177	+ .003	+20 19 52.28	14.046	.363	− .01	4	18.22
1280	CD−25° 1245	G5	9.5		2 18.110	2.6134	+ .0015	+ .0028	−25 42 4.56	14.031	.278	− .065	5	18.62
1281	BD+26° 509		*10.13*		3 2 19.890	+ 3.5518	+ .0220	.000	+26 39 16.87	+14.029	− .376	+ .03	4	18.55
1282	BD+67° 246	A2	*8.62*	8.5	2 50.68	5.4472	+ .1390	+ .0041	+68 3 26.34	13.997	.574	− .028	4	18.64
1283	β Persei	B8	Var.	2.42	2 57.393	3.8944	+ .0355	+ .0006	+40 38 54.39	13.990	.413	− .005	4	18.17
1284	BD+22° 438	G5	*8.94*	8.78	3 0.735	3.4646	+ .0189	.000	+22 15 55.19	13.987	.369	− .02	5	18.29
1285	BD+ 4° 496	K2	*8.40*	8.56	3 2.299	3.1516	+ .0101	− .0006	+ 4 42 43.00	13.985	.335	− .016	5	19.55
1286	BD+59° 598	B9	*8.62*	8.69	3 3 7.441	+ 4.7272	+ .0824	.000	+59 56 6.48	+13.980	− .500	+ .01	4	18.97
1287	Wi (1) 2ʰ 1062	G5	7.10	7.34	3 9.655	3.0374	+ .0077	− .0020	− 2 6 36.81	13.977	.323	− .022	[illegible]	17.98
1288	ι Persei	G0	4.17	4.3	3 16.863	4.1873	+ .0497	+ .1294	+49 18 31.87	13.970	.443	− .084	4	18.89
1289	BD+ 6° 482	A2	8.5	8.85	3 24.915	3.1894	+ .0111	.000	+ 6 56 19.36	13.961	.340	+ .03	[illegible]	18.66
1290	Wi (1) 2ʰ 1077	G0	7.16	6.83	3 31.884	2.8324	+ .0041	.0000	−14 3 48.12	13.954	.302	− .262	5	19.62
1291	Brad 440	K5	6.48	5.81	3 3 48.819	+ 3.3939	+ .0166	+ .0027	+18 29 20.36	+13.936	− .362	− .018	[illegible]	18.62
1292	BD− 6° 610	K2	8.8	8.05	3 50.989	2.9705	+ .0064	− .001	− 6 4 24.10	13.934	.318	+ .02	4	18.86
1293	BD+48° 853	F5	8.1	8.10	4 0.804	4.1524	+ .0476	+ .002	+48 19 11.99	13.924	.441	− .04	4	19.13
1294	BD+ 8° 465		9.0		4 15.316	3.2176	+ .0117	− .005	+ 8 33 45.73	13.909	.344	+ .06	[illegible]	18.54
1295	BD− 4° 529 m.	F5	8.6	8.8	4 26.106	3.0071	+ .0070	+ .0015	− 3 53 45.90	13.897	.322	+ .011	4	18.56
1296	BD+42° 714		9.7	9.4	3 4 33.189	+ 3.9623	+ .0381	− .004	+42 43 1.32	+13.890	− .422	− .02	[illegible]	18.46
1297	Brad 441	B9	5.60	6.10	4 47.629	3.6023	+ .0234	+ .0022	+28 46 21.10	13.875	.385	− .025	4	18.75
1298	BD+11° 442		*9.28*		4 49.641	3.2803	+ .0134	+ .0031	+12 8 51.05	13.872	.351	− .015	5	17.49
1299	BD+80° 100		*8.66*	8.9	4 55.74	9.1981	+ .6595	+ .0064	+81 2 48.41	13.866	.973	− .013	5	19.24
1300	Oelt 3501	A5	7.50	7.48	5 10.575	4.3473	+ .0576	− .0022	+52 50 24.00	13.850	.464	− .024	4	18.81
1301	BD+34° 589	K0	8.57	8.2	3 5 17.021	+ 3.7542	+ .0291	+ .0077	+35 11 20.45	+13.842	− .401	− .020	4	17.93
1302	BD−16° 573	K0	10.0		5 26.868	2.7957	+ .0036	+ .0003	−15 58 57.60	13.833	.301	− .012	[illegible]	19.32
1303	BD+21° 413 m.	F0	7.77	7.21	5 29.611	3.4526	+ .0182	+ .0019	+21 26 35.52	13.830	.370	+ .009	[illegible]	19.07
1304	CD−27° 1103	A0	7.46	6.8	5 47.136	2.5788	+ .0015	+ .0016	−27 1 14.06	13.812	.278	− .007	4	19.01
1305	BD−10° 626	G0	8.51	8.60	5 49.299	2.9040	+ .0052	+ .0057	− 9 52 52.27	13.810	.312	− .102	5 4	17.97 19.05
1306	BD−18° 545	K2	8.8	8.6	3 5 55.229	+ 2.7509	+ .0030	+ .0009	−18 22 11.25	+13.803	− .296	+ .002	4 3	19.57 21.18
1307	CD−28° 1038	K0	8.7	8.4	5 56.694	2.5428	+ .0012	+ .0045	−28 40 7.31	13.801	.274	+ .002	4	19.81
1308	Wi (2) 2ʰ 1461	K0..	7.38	7.20	5 56.931	3.6765	+ .0259	+ .0027	+31 55 25.36	13.801	.395	− .032	5	19.95
1309	BD− 8° 593		9.2		5 56.932	2.9348	+ .0058	+ .001	− 8 6 4.85	13.801	.316	+ .03	[illegible]	19.56
1310	BD+13° 519	K2	8.9	8.76	6 20.303	3.3155	+ .0141	+ .0037	+14 2 27.13	13.777	.355	− .059	4	18.31
1311	BD+ 1° 561	K0	6.85	6.50	3 6 46.565	+ 3.1069	+ .0091	− .0010	+ 2 0 50.09	+13.749	− .336	− .027	4	18.97
1312	Grmb 621	B8	6.00	6.15	6 52.116	3.9510	+ .0370	+ .0032	+42 4 29.10	13.743	.425	− .010	[illegible]	18.72
1313	Bo VI+47° 779	K0	6.42	6.37	6 53.779	4.1318	+ .0455	+ .0066	+47 25 35.21	13.741	.444	− .100	4	18.90
1314	δ Arietis	K0	4.53	4.44	7 3.032	3.4160	+ .0170	+ .0107	+19 25 30.19	13.731	.369	− .006	63 50	20.30 20.21
1315	Lal 5932	G5	7.58	7.34	7 4.289	2.7103	+ .0027	+ .0048	−20 24 51.02	13.730	.294	− .019	5	18.97
1316	BD+87° 26		*8.57*	9.2	3 7 8.64	+26.519	+8.000	+ .056	+87 37 17.01	+13.726	−2.823	− .036	4	18.49
1317	BD−22° 561 br.	K0	9.8		7 19.803	2.6729	+ .0023	+ .0027	−22 18 20.79	13.714	.289	− .012	4	19.13
1318	BD+49° 873		*9.35*		7 27.906	4.2412	+ .0509	.000	+50 9 9.77	13.705	.458	− .28	4	19.45
1319	BD+73° 173		*8.32*	8.57	7 33.77	6.4177	+ .2292	− .0029	+73 44 24.52	13.699	.688	− .012	4	18.46
1320	CD−24° 1486	F0	9.4		7 38.782	2.6314	+ .0020	+ .0030	−24 19 52.24	13.693	.286	− .018	4	[illegible]

1265. F5, A3.
1268. 3^m3 to 4^m1.

1283. 2^m3 to 3^m5.
1295. 9^m2-9^m5, 0″7, 13°.

1303. 8^m5-8^m5, 0″6, 147°.
1317. 12^m7, 6″8, 59°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1321	BD+33° 600		*9.46*	8.8	3 7 39.208	+ 3.7216	+0.0273	+0.004	+33 37 11.67	+13.693	−0.402	−0.05	4	18.84
1322	BD− 0° 503	K0	7.21	6.96	7 56.356	3.0694	+ .0083	− .0006	− 0 11 36.31	13.675	.333	+ .022	6	20.06
1323	Pi 3^h 6	*	5.84	5.79	8 11.523	3.1817	+ .0108	− .0023	+ 6 21 37.35	13.659	.345	− .012	4	18.97
1324	BD+49° 875	A0	8.5	8.9	8 14.326	4.2199	+ .0495	− .002	+49 32 33.43	13.656	.457	+ .01	4	18.99
1325	BD+63° 404	B8	*8.42*	8.56	8 21.37	5.0496	+ .1013	+ .001	+63 39 35.72	13.648	.545	− .02	4	19.76
1326	BD+24° 451	A2	8.61	8.56	3 8 25.271	+ 3.5337	+ .0206	− .0001	+25 12 56.09	+13.644	− .383	− .002	4	18.88
1327	BD+16° 403	F5	*8.68*	8.58	8 29.782	[illegible]	+ .0156	.000	+16 49 57.29	13.639	.366	.00	4	18.55
1328	BD−12° 614	K5	9.0	8.87	8 39.348	2.8659	+ .0047	.0000	−11 54 55.60	13.629	.311	− .005	4	19.00
1329	12 Eridani *m.*	F8	3.95	4.1	8 40.302	2.5227	+ .0012	+ .0251	−29 18 7.71	13.628	.276	+ .647	5	18.19
1330	94 Ceti *br.*	F8	5.14	5.12	8 41.332	3.0471	+ .0079	+ .0135	− 1 29 40.19	13.627	.332	− .055	4	19.50
1331	BD− 2° 573	G0	9.5	8.9	3 8 46.382	+ 3.0307	+ .0076	+ .0049	− 2 27 17.70	+13.621	− .330	+ .001	5	19.71
1332	BD+11° 451		*9.24*		8 56.704	3.2679	+ .0128	− .004	+11 15 17.12	13.610	.355	− .03	4	18.66
1333	BD− 4° 551		10.0		9 29.630	2.9936	+ .0069	+ .0038	− 4 36 0.93	13.575	.327	− .029	4	19.48
1334	BD+39° 738	A0	8.5	9.1	9 31.929	3.8866	+ .0335	.000	+39 36 45.10	13.572	.423	+ .01	4	18.38
1335	Grmb 627	A0	5.92	5.60	9 39.458	4.5788	+ .0690	+ .0001	+56 50 37.10	13.564	.497	+ .004	4	19.13
1336	BD+41° 639		9.2		3 9 47.943	+ 3.9383	+ .0357	+ .0079	+41 19 22.96	+13.555	− .429	− .033	4	19.15
1337	BD−14° 625	A2	7.56	7.93	9 50.430	2.8283	+ .0042	+ .0010	−13 56 17.87	13.553	.310	+ .030	4	18.99
1338	BD+32° 588	G5	*8.15*	7.93	9 51.602	3.6968	+ .0261	− .001	+32 21 54.72	13.551	.403	− .20	4	18.61
1339	48 H Cephei *br.*	F0	5.50	5.40	10 6.90	7.4980	+ .3577	+ .0203	+77 26 33.91	13.535	.812	− .049	8	18.96
1340	ζ Arietis	A0	4.95	4.88	10 17.944	3.4464	+ .0177	− .0017	+20 44 56.23	13.523	.377	− .075	72 61	19.07 19.34
1341	BD+ 3° 447	A0	*8.91*	9.32	3 10 43.984	+ 3.1419	+ .0098	+ .0001	+ 4 0 12.41	+13.495	− .345	− .004	4	18.22
1342	BD+23° 424	F5	*9.40*		10 56.273	3.4990	+ .0192	.000	+23 19 5.21	13.482	.383	− .01	4	18.59
1343	BD+57° 710	B8	*9.15*	9.1	11 5.090	4.6491	+ .0725	− .003	+57 52 58.76	13.472	.507	− .01	4	18.67
1344	BD− 6° 630	A2	8.7	8.85	11 7.972	2.9728	+ .0065	.000	− 5 45 59.35	13.469	.326	− .01	4	18.47
1345	BD−16° 600		9.8		11 12.371	2.7900	+ .0038	− .001	−15 56 14.54	13.464	.307	+ .03	4	18.97
1346	CD−26° 1207	K2	9.5		3 11 17.366	+ 2.5736	+ .0017	+ .0180	−26 44 42.62	+13.459	− .284	+ .076	4	18.64
1347	Lac 1020	G0	6.85		11 31.327	2.3564	+ .0009	+ .0030	−35 51 17.34	13.444	.260	+ .022	5	20.13
1348	ζ Eridani	A3	4.90	4.86	11 56.771	2.9134	+ .0055	− .0003	− 9 6 58.13	13.416	.322	+ .045	4	18.35
1349	BD+53° 639	F8	*8.70*	8.5	12 0.829	4.4198	+ .0586	+ .001	+53 36 2.32	13.412	.485	.00	4	18.84
1350	BD+27° 488	F8	*8.33*	8.60	12 14.278	3.6055	+ .0225	+ .0066	+28 11 27.88	13.397	.397	− .048	5	19.13
1351	BD+33° 614	G0	*9.59*		3 12 16.231	+ 3.7493	+ .0276	+ .002	+34 14 19.44	+13.395	− .412	+ .01	4	18.28
1352	BD+43° 674	B5	5.38	5.27	12 23.944	4.0243	+ .0389	+ .0025	+43 43 55.51	13.387	.443	− .027	4	17.83
1353	Grmb 639	A0	5.97	5.92	12 34.243	3.8784	+ .0326	+ .0022	+38 59 25.54	13.376	.427	− .021	6	19.33
1354	CD−29° 1204	F0	8.5	8.2	12 42.032	2.5223	+ .0015	+ .0016	−28 55 44.48	13.367	.280	− .012	4	18.56
1355	BD+ 8° 489		*9.05*	9.1	13 3.675	3.2273	+ .0116	.000	+ 8 48 45.70	13.344	.357	+ .01	4	17.33
1356	BD+46° 726	G0	7.8	7.47	3 13 5.353	+ 4.1272	+ .0433	+ .005	+46 35 46.86	+13.342	− .455	− .04	4	17.81
1357	Brad 402	K0	5.78	5.89	13 6.36	13.6868	+1.6763	+ .0500	+84 37 54.22	13.341	1.495	− .133	8	18.97
1358	BD− 8° 619		9.2		13 34.711	2.9335	+ .0058	− .003	− 7 55 47.50	13.310	.326	+ .05	4	18.21
1359	Cape (80) 1361	A0	6.89		13 38.405	2.4567	+ .0013	+ .0013	−31 38 41.77	13.306	.273	− .015	4	19.24
1360	BD+16° 417		*9.59*		13 45.522	[illegible]	+ .0151	+ .002	+16 17 21.52	13.298	.373	+ .03	5	19.98
1361	Wi (1) 3^h 172	B8	7.64	7.96	3 13 51.057	+ 3.2951	+ .0133	− .0004	+12 31 54.96	+13.292	− .365	+ .005	5	17.34
1362	BD+42° 738	K0	*8.65*	8.55	13 58.024	3.9839	+ .0366	− .002	+42 19 8.85	13.284	.441	.00	4	19.20
1363	BD+60° 666		*9.08*	9.1	14 1.21	4.8415	+ .0828	+ .002	+60 29 41.79	13.281	.534	.00	4	19.48
1364	BD+36° 676	K0	*8.05*	7.97	14 20.972	3.8166	+ .0298	+ .001	+36 35 9.34	13.260	.423	− .03	4	17.38
1365	BD+ 6° 512		8.9	9.1	14 30.055	3.1977	+ .0109	− .003	+ 7 6 7.82	13.249	.355	.00	4	17.68
1366	BD+82° 83		*8.92*		3 14 31.94	+10.6164	+ .8823	+ .0076	+82 25 37.59	+13.247	−1.168	+ .003	4	19.22
1367	BD+51° 716	B9	*7.20*	7.23	14 35.608	4.3261	+ .0526	− .0073	+51 19 44.41	13.243	.479	− .070	4	18.98
1368	Paris 3965 *br*	F0	5.92	6.2	15 1.967	2.7297	+ .0032	+ .0083	−18 50 57.99	13.215	.305	− .021	4	17.54
1369	κ Ceti	G5	4.96	5.35	15 9.744	3.1268	+ .0083	+ .0177	+ 3 4 39.55	13.206	.348	+ .094	5	16.80
1370	BD− 0° 525		9.3		15 16.736	3.0684	+ .0082	+ .0023	− 0 14 52.79	13.198	.343	+ .010	4	18.53
1371	CD−29° 1220 *m*	F5	*8.82*		3 15 19.510	+ 2.4964	+ .0015	+ .0018	−29 48 22.25	+13.195	− .276	+ .038	4	18.22
1372	BD+47° 805		8.7	8.2	15 35.891	4.1863	+ .0453	− .002	+47 52 37.84	13.177	.466	− .08	4	18.60
1373	BD+23° 443	G0	9.4	9.28	15 40.001	3.5261	+ .0195	− .001	+24 14 4.92	13.173	.392	− .07	4	18.08
1374	BD+14° 551		*9.56*		15 41.178	3.3341	+ .0142	− .001	+14 32 43.39	13.171	.372	− .01	4	18.06
1375	BD+66° 262		*8.64*	8.8	15 49.87	5.4334	+ .1238	+ .0015	+66 52 48.79	13.162	.603	− .015	4	18.21
1376	BD+26° 542	G5	8.0	7.8	3 15 51.454	+ 3.5783	+ .0211	− .0025	+26 38 19.02	+13.160	− .399	+ .013	4	18.23
1377	τ^4 Eridani *br.*	Mb	3.65	[illegible]	15 57.491	2.6643	+ .0026	+ .0036	−22 2 54.48	13.153	.290	+ .042	4	18.26
1378	BD− 2° 605		10.0		16 1.629	3.0402	+ .0077	+ .0041	− 1 50 42.21	13.149	.340	− .046	4	18.42
1379	BD+18° 463		*8.50*	8.66	16 13.085	3.4085	+ .0161	.000	+18 26 58.69	13.136	.382	− .04	4	18.22
1380	BD+30° 530	A2	*8.58*	8.85	16 25.042	3.6672	+ .0240	+ .0001	+30 28 44.09	13.123	.410	− .022	5	19.34

1323. G5, A5.
1329. 4^m0-7^m4, <1″0, 60°.
1330. 11^m5, 1″3, 218°.
1339. 12^m5, 1″2, 275°.
1368. 8^m5, 6″3, 116°.
1371. 9^m5-9^m6, 0″3, 205°.
1377. 10^m5, 6″0, 289°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1381	τ^1 Arietis	B3	5.17	5.50	3 16 36.224	+3.4579	+0.0174	+0.0021	+20 51 34.86	+13.111	−0.387	−0.030	4	18.11
1382	BD−20° 620	K0	9.5		16 50.666	2.7044	+ .0030	− .0050	−20 0 17.80	13.095	.304	− .050	4	18.36
1383	CD−24° 1586	F5	7.44	7.2	16 58.464	2.6135	+ .0023	+ .0036	−24 24 9.02	13.086	.294	− .046	4	17.82
1384	BD+ 0° 572	F0	8.13	8.7	17 5.587	3.0773	+ .0084	+ .0041	+ 0 15 34.92	13.079	.346	+ .020	4	18.02
1385	BD+ 8° 500 *m.*	G0	*8.69*	8.84	17 25.694	3.2237	+ .0114	− .0015	+ 8 28 18.16	13.056	.362	+ .036	4	18.63
1386	BD+10° 434		*9.97*		3 17 28.929	+3.2703	+ .0125	+ .005	+11 1 27.48	+13.053	− .367	− .08	4	18.80
1387	BD−11° 646 *m.*	F2	9.2	8.0	17 41.277	2.8661	+ .0049	.0000	−11 30 17.89	13.039	.323	+ .074	5	18.06
1388	Pi 3^h 27	K2	5.55	5.36	17 42.71	5.1820	+ .1031	+ .0017	+64 18 5.24	13.037	.579	+ .016	4	17.74
1389	BD+37° 760	K0	7.8	7.8	17 45.532	3.8482	+ .0303	+ .004	+37 22 30.62	13.034	.431	− .02	4	18.45
1390	BD+40° 725	A2	7.78	7.73	18 13.020	3.9544	+ .0343	.0000	+40 55 21.43	13.004	.444	− .011	4	17.81
1391	BD−13° 637	K0	8.6	9.2	3 18 19.919	+2.8273	+ .0045	.0000	−13 33 32.02	+12.997	− .319	+ .005	4	18.10
1392	BD− 3° 542	G5	9.3		18 22.354	3.0154	+ .0071	+ .0001	− 3 13 12.54	12.993	.341	+ .002	4	18.44
1393	BD−22° 593	K2	8.8	8.62	18 28.876	2.6534	+ .0027	+ .0026	−22 23 9.96	12.986	.300	.000	4	18.45
1394	α Persei	F5	1.90	2.37	18 36.087	4.2684	+ .0482	+ .0028	+49 34 39.73	12.978	.480	− .028	4	18.75
1395	Lac 1071	A0	6.26	6.5	18 49.934	2.5783	+ .0021	+ .0018	−25 52 24.68	12.963	.292	+ .017	4	17.52
1396	BD+ 5° 484		*9.71*		3 18 53.017	+3.1816	+ .0105	+ .012	+ 6 5 49.84	+12.959	− .359	− .04	4	18.56
1397	BD+54° 679	A2	*8.06*	8.8	19 16.548	4.4993	+ .0595	+ .0042	+54 24 35.01	12.933	.506	− .056	4	18.79
1398	BD+21° 448	K0	9.1	9.2	20 12.091	3.4865	+ .0179	.000	+21 59 45.76	12.871	.396	.00	4	17.42
1399	BD+24° 484	K5	*9.56*	9.15	20 16.746	3.5540	+ .0199	+ .0015	+25 9 24.25	12.866	.403	− .023	4	17.92
1400	BD+59° 655	A2	7.66	7.2	20 17.49	4.8566	+ .0796	+ .003	+60 7 27.45	12.865	.548	.00	4	17.40
1401	BD−17° 657 *br.*	G0	9.2		3 20 21.461	+2.7480	+ .0036	+ .0038	−17 34 41.24	+12.861	− .312	+ .020	4	18.06
1402	o Tauri	G5	3.80	3.68	20 30.327	3.2305	+ .0115	− .0045	+ 8 44 53.65	12.851	.367	− .078	85 57	19.64 19.88
1403	BD−16° 630 *m.*	G0	7.55	7.09	20 40.971	2.7797	+ .0039	+ .0155	−15 56 3.20	12.839	.317	− .096	4	18.57
1404	BD+42° 762		*8.89*	8.90	20 43.488	4.0071	+ .0358	− .002	+42 18 43.61	12.836	.454	− .02	4	18.72
1405	BD+17° 550	K0	*8.90*	8.89	20 51.685	3.3958	+ .0153	+ .0049	+17 27 50.60	12.827	.386	− .087	4	18.11
1406	Wi (1) 3^h 312	G5	7.41	7.45	3 21 10.172	+2.9871	+ .0068	+ .0024	− 4 45 40.18	+12.806	− .340	+ .045	4	18.73
1407	BD+49° 934		*8.86*	9.10	21 13.646	4.3083	+ .0491	− .0026	+50 13 57.30	12.802	.489	− .012	5	19.66
1408	BD+36° 689	F2	*8.44*	8.2	21 14.194	3.8401	+ .0293	+ .001	+36 43 59.72	12.802	.436	− .02	4	18.07
1409	BD+13° 548		*8.67*	8.53	21 16.033	3.3166	+ .0134	− .002	+13 20 24.11	12.800	.378	− .01	4	18.30
1410	BD+ 1° 592	G0	*9.28*		21 35.311	3.1042	+ .0088	− .0004	+ 1 45 14.02	12.778	.355	− .073	4	17.63
1411	BD+78° 117		*9.02*		3 21 36.10	+8.1105	+ .4045	− .0070	+78 26 54.13	+12.777	− .916	+ .009	4	19.22
1412	BD+46° 752		8.92		21 38.940	4.1596	+ .0421	+ .003	+46 32 40.07	12.774	.473	− .02	4	18.88
1413	BD− 1° 495	F8	8.7	8.4	22 13.005	3.0490	+ .0078	+ .0012	− 1 18 52.83	12.736	.348	− .003	5	17.59
1414	2 H Camelop *br.*	B9	4.44	4.66	22 34.524	4.8384	+ .0770	+ .0005	+59 39 46.44	12.711	.551	− .001	4	18.82
1415	BD+30° 544		*8.81*	9.2	22 44.804	3.6969	+ .0241	− .0075	+31 7 7.65	12.700	.421	− .031	4	18.53
1416	ξ Tauri	B8	3.75	3.83	3 22 49.842	+3.2449	+ .0117	+ .0040	+ 9 27 17.07	+12.694	− .371	− .041	54 45	19.04 19.27
1417	BD−10° 679	A2	9.21		22 52.718	2.8941	+ .0054	− .0013	− 9 47 52.76	12.691	.332	.000	4	18.36
1418	BD+38° 727	F0	*9.87*		22 53.180	3.9008	+ .0312	− .001	+38 40 46.12	12.690	.446	.00	4	18.04
1419	BD−22° 607	G0	9.0		23 13.759	2.6554	+ .0029	+ .0052	−21 56 47.63	12.667	.304	+ .014	4	19.21
1420	Wi (2) 3^h 412 *br.*	A3	7.04	7.00	23 24.513	3.4537	+ .0168	+ .0005	+20 11 11.66	12.655	.395	+ .001	4	18.50
1421	BD+68° 253	K0	*8.90*	8.8	3 23 32.91	+5.6970	+ .1362	+ .0081	+68 26 28.10	+12.645	− .650	− .013	4	18.71
1422	BD− 7° 602	K0	9.8	9.1	23 47.639	2.9387	+ .0060	− .002	− 7 21 33.60	12.629	.338	− .01	4	18.54
1423	Lal 6370	B3	7.06	7.04	23 51.934	3.6744	+ .0231	− .0016	+30 5 55.78	12.624	.422	− .019	5	20.11
1424	BD+54° 684	A2	4.98	5.4	23 53.447	4.5651	+ .0608	− .0039	+55 10 34.65	12.622	.522	− .002	4	18.54
1425	Paris 4113	K0	5.85	5.57	24 11.964	2.8601	+ .0050	+ .0014	−11 33 45.55	12.601	.329	− .052	4	18.76
1426	BD+12° 479		*9.32*	8.7	3 24 13.892	+3.3107	+ .0131	+ .010	+12 53 45.22	+12.599	− .381	+ .03	4	18.92
1427	CD−27° 1237	G0	9.1		24 20.303	2.5270	+ .0021	+ .0026	−27 41 28.84	12.592	.292	+ .111	4	19.48
1428	BD+72° 176		*9.08*		24 37.67	6.3664	+ .1931	− .0061	+72 27 47.10	12.572	.728	+ .027	4	18.53
1429	BD+20° 574 *m.*	F2	*9.53*	9.3	24 50.056	3.4692	+ .0170	− .002	+20 50 16.36	12.558	.399	+ .01	4	18.29
1430	BD+ 2° 552	G5	6.54	6.62	24 53.383	3.1268	+ .0092	+ .0001	+ 2 58 22.04	12.554	.361	+ .002	4	17.75
1431	CD−29° 1279	K2	9.12		3 24 54.051	+2.4784	+ .0019	+ .0016	−29 42 14.47	+12.554	− .287	− .001	4	19.52
1432	σ Persei	K0	4.55	4.70	24 55.540	4.2186	+ .0436	+ .0006	+47 43 13.10	12.552	.485	+ .022	4	19.47
1433	BD+39° 795	F2	8.8		24 57.672	3.9418	+ .0323	− .002	+39 49 39.90	12.549	.453	+ .01	4	19.33
1434	BD+57° 727	K7	*8.50*	8.46	24 58.090	4.7547	+ .0707	+ .001	+58 13 11.86	12.549	.546	− .01	4 3	19.24 20.06
1435	BD+44° 717	A0	8.6	8.52	25 6.056	4.0993	+ .0385	− .0011	+44 33 31.24	12.540	.471	.000	4	19.16
1436	BD+16° 450	A0	7.02	7.26	3 25 11.450	+3.3814	+ .0146	+ .0012	+16 29 15.64	+12 534	− .390	− .031	4	18.24
1437	BD+32° 632	F2	*9.11*	9.1	25 27.845	3.7448	+ .0252	− .0025	+32 46 32.66	12.515	.432	− .004	4	18.54
1438	BD+26° 565		*9.15*	8.91	25 31.619	3.5990	+ .0206	+ .0040	+26 44 58.65	12.511	.415	.000	4	18.46
1439	BD−20° 648	G5	7.34	7.08	25 49.733	2.6958	+ .0032	+ .0023	−19 49 48.53	12.490	.313	+ .062	4	18.22
1440	s Tauri	A0	5.12	5.14	26 1.934	3.2772	+ .0122	− .0006	+11 3 46.36	12.476	.379	− .019	5	19.17

1385. 9^{m}1-10^{m}1, 1$''$1, 53°.
1387. 9^{m}9-10^{m}0, 0$''$3, 222°.
1401. 12^{m}2, 4$''$2, 256°.
1403. 8^{m}2-8^{m}2, 0$''$1, 181°.
1414. 8^{m}5, 2$''$4, 161°.
1420. 8^{m}0, 7$''$0, 162°.
1429. 9^{m}5-11^{m}9, 0$''$6, 339°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1441	Lal 6499	F5	6.84	6.73	3 26 5.514	+2.6124	+0.0027	+0.0049	−23 45 4.42	+12.472	−0.303	+0.024	5	18.41
1442	BD− 3° 564	F5	9.0	9.4	26 13.483	3.0132	+ .0072	− .0004	− 3 15 9.52	12.463	.349	.000	4	18.05
1443	CD−28° 1162		10.2	ft.	26 14.420	2.5002	+ .0021	+ .0042	−28 40 39.08	12.462	.291	.000	4	19.38
1444	f Tauri	K0	4.28	4.19	26 27.191	3.3081	+ .0129	+ .0012	+12 39 48.53	12.447	.384	− .004	46 39	18.42 18.53
1445	BD+54° 689	K5	*8.68*	8.8	26 30.989	4.5642	+ .0595	.000	+54 54 50.43	12.443	.526	− .06	4	17.72
1446	BD+ 7° 514	K5	*8.46*	8.6	3 26 35.206	+3.2218	+ .0109	+ .0013	+ 8 5 43.72	+12.438	− .373	− .033	4	18.82
1447	BD+43° 744	G5	8.7	8.10	26 36.588	4.0638	+ .0367	+ .0280	+43 24 1.28	12.437	.470	− .117	5	19.84
1448	17 Eridani	B9	4.80	5.24	26 38.790	2.9746	+ .0066	+ .0006	− 5 20 54.77	12.434	.346	+ .010	4	18.51
1449	CD−25° 1435		10.9	ft.	26 40.700	2.5678	+ .0024	+ .0038	−25 43 3.20	12.432	.299	− .034	4	19.39
1450	BD− 6° 690	G5	8.3	8.00	27 3.754	2.9642	+ .0064	− .002	− 5 54 9.36	12.405	.344	+ .02	4	18.64
1451	BD−16° 650	K0	8.6	9.2	3 27 11.554	+2.7749	+ .0041	− .0048	−15 50 3.11	+12.398	− .323	− .010	4	19.33
1452	BD+69° 217		9.18		27 16.11	5.9213	+ .1497	+ .0060	+69 45 30.00	12.391	.684	− .040	4	19.14
1453	Pulk (55) 503	B3	5.80	5.98	27 34.004	3.8142	+ .0271	− .0006	+35 11 26.44	12.371	.441	− .008	4	18.62
1454	BD+73° 188	K5	*7.90*	8.30	27 38.62	6.5995	+ .2102	+ .0072	+73 23 39.82	12.366	.762	+ .001	4	19.22
1455	BD+27° 519		*8.42*	8.75	27 46.238	3.6344	+ .0214	+ .0001	+28 5 42.28	12.356	.422	+ .013	4	18.72
1456	BD−13° 675	A2	8.6	7.9	3 27 50.234	+2.8296	+ .0047	− .0021	−13 0 22.88	+12.352	− .330	+ .016	4	18.54
1457	BD−18° 625	K2	8.7	8.5	28 10.385	2.7149	+ .0035	− .0013	−18 45 17.13	12.329	.317	+ .029	4	19.53
1458	BD+62° 581	K2	8.21	7.94	28 13.20	5.0763	+ .0878	.000	+62 15 24.46	12.326	.589	− .02	5	19.84
1459	Brad 489	B8	5.64	6.14	28 16.064	3.2416	+ .0113	+ .0018	+ 9 6 14.53	12.322	.377	− .040	4	18.74
1460	BD− 7° 619 *fr. f.*	F8	10.0		28 21.756	2.9365	+ .0060	− .001	− 7 21 34.46	12.316	.343	− .04	4	18.86
1461	BD+15° 499 *br.*	G0	8.54	8.63	3 28 24.137	+3.3608	+ .0140	+ .0016	+15 16 41.75	+12.314	− .393	+ .045	4	19.12
1462	BD+18° 503	A0	*8.15*	8.26	28 32.017	3.4383	+ .0159	+ .0008	+19 6 50.62	12.304	.401	− .048	4	18.77
1463	BD+ 4° 548	G5	7.40		28 37.413	3.1648	+ .0098	+ .0010	+ 4 59 6.53	12.298	.370	− .027	4	18.25
1464	BD+46° 770	A2	*9.29*	8.9	28 38.082	4.2047	+ .0418	− .003	+47 0 26.06	12.297	.489	.00	4	18.52
1465	BD+ 2° 559		*9.38*		28 49.274	3.1152	+ .0089	− .0009	+ 2 18 17.54	12.284	.365	+ .011	4	18.29
1466	BD+50° 787	F8	*9.36*	9.3	3 28 57.439	+4.3525	+ .0482	.000	+50 27 35.58	+12.274	− .506	.00	4	18.80
1467	ε Eridani	K0	3.81	4.0	29 9.744	2.8915	+ .0055	− .0657	− 9 43 41.67	12.261	.339	+ .015	4	17.82
1468	CD−27° 1269		9.5		29 15.574	2.5333	+ .0023	+ .0080	−27 1 22.93	12.254	.298	+ .016	4	18.62
1469	BD+ 6° 552	G5	7.9	7.67	29 28.805	3.1962	+ .0104	− .0017	+ 6 39 26.61	12.238	.374	− .010	4	18.55
1470	BD+21° 484	A2	*9.17*	9.5	29 29.137	3.4888	+ .0171	− .001	+21 27 39.13	12.238	.408	.00	4	18.50
1471	BD+32° 643	K2	*8.73*	8.6	3 29 35.227	+3.7533	+ .0247	+ .002	+32 43 59.08	+12.231	− .438	.00	4	18.92
1472	BD+38° 749	F0	6.99	6.97	29 52.201	3.9102	+ .0300	+ .0030	+38 19 8.82	12.212	.457	− .022	7	18.67
1473	BD+64° 398	F8	8.00	8.34	29 56.55	5.3550	+ .1045	− .0011	+65 5 18.47	12.207	.625	− .021	4 5	17.94 18.76
1474	τ^4 Eridani	B8	4.32	4.67	30 15.195	2.6461	+ .0031	+ .0034	−21 54 1.76	12.185	.311	− .020	4	19.02
1475	BD+29° 577		*8.99*	9.2	30 21.091	3.6776	+ .0223	+ .0046	+29 40 43.20	12.178	.431	− .052	4	18.36
1476	BD+52° 703	K5	7.69	7.06	3 30 27.272	+4.4648	+ .0529	+ .0006	+52 39 57.27	+12.171	− .522	+ .005	4	18.15
1477	BD+10° 460	G0	*8.06*	7.79	30 41.164	3.2750	+ .0119	− .0024	+10 46 45.13	12.155	.381	− .023	5	18.19
1478	BD+18° 507	K5	7.87	7.23	30 43.340	3.4311	+ .0155	− .0016	+18 38 15.52	12.153	.403	− .055	4	18.15
1479	BD− 1° 513	G5	8.5	8.72	31 7.729	3.0541	+ .0078	+ .0049	− 1 0 8.97	12.124	.360	− .111	5	17 94
1480	BD+74° 163	F5	9.2	8.9	31 12.87	7.0599	+ .2494	− .0018	+75 8 7.81	12.118	.825	+ .013	4	18.83
1481	BD+23° 479	G5	*8.94*	8.5	3 31 16.246	+3.5389	+ .0182	− .001	+23 38 55.42	+12.114	− .416	.00	4	17.73
1482	BD+43° 771	B9	8.9	8.70	31 18.176	4.0943	+ .0365	− .002	+43 48 44.70	12.112	.481	.00	4	18.11
1483	BD− 9° 707	K0	9.2	8.2	31 24.610	2.9033	+ .0056	.000	− 9 2 3.91	12.105	.343	+ .02	4	18.95
1484	BD−15° 621		9.8		31 38.674	2.7853	+ .0044	− .0012	−15 5 11.63	12.088	.330	− .052	5	18.73
1485	BD+61° 618		*9.10*	8.6	31 41.96	5.0601	+ .0842	+ .009	+61 47 15.76	12.084	.594	.00	5	19.64
1486	BD+33° 682	K0	6.98	6.78	3 31 42.333	+3.7942	+ .0257	+ .0023	+34 5 1.90	+12.084	− .445	− .051	4	18.21
1487	BD−11° 694	K5	8.8	8.77	31 43.729	2.8589	+ .0050	− .0012	−11 20 25.42	12.082	.338	.000	4	18.65
1488	BD+11° 496	G5	*8.44*	8.44	32 3.344	3.2946	+ .0123	− .0014	+11 44 37.39	12.060	.388	− .045	4	18.65
1489	BD+36° 731	A2	*9.60*	9.4	32 11.311	3.8767	+ .0284	+ .001	+36 58 33.78	12.050	.456	− .01	4	18.41
1490	BD+76° 128	A0	7.90	8.00	32 12.89	7.6662	+ .3140	− .0056	+76 54 38.25	12.048	.900	− .030	5	18.40
1491	Brad 494	A0	[illegible]	7.10	3 32 15.525	+3.5250	+ .0177	− .0008	+22 56 50.79	+12.045	− .417	− .036	5	17.18
1492	BD+48° 962	B9	7.04	7.20	32 28.122	4.2946	+ .0444	− .0005	+48 49 13.11	12.031	.506	+ .022	4	18.67
1493	Brad 498	A0	5.32	5.46	32 38.646	2.7307	+ .0038	+ .0017	−17 43 52.40	12.018	.325	− .013	4	18.77
1494	Brad 496 *br.*	G0	6.28	6.23	32 40.880	3.0788	+ .0082	− .0014	+ 0 19 39.38	12.016	.364	− .150	5	17.45
1495	10 Tauri	G5	4.40	4.60	32 47.323	3.0755	+ .0081	− .0156	+ 0 8 56.44	12.008	.364	− .482	4	18.80
1496	BD−13° 693	G5	9.2		3 32 53.353	+2.8141	+ .0046	+ .0015	−13 34 55.80	+12.001	− .334	+ .002	4	18.40
1497	CD−23° 1462		9.9		32 59.739	2.6025	+ .0028	+ .0034	−23 42 34.72	11.994	.310	− .050	4	19.54
1498	BD+56° 829	K7	*8.50*	8.6	33 14.619	4.7363	+ .0651	− .001	+57 12 44.28	11.977	.559	.00	5	19.07
1499	BD+ 4° 563		*9.43*		33 19.125	3.1697	+ .0088	− .0007	+ 5 10 22.44	11.971	.376	− .020	4 5	17.72 18.58
1500	BD−21° 663	F8	9.2		33 53.090	2.6571	+ .0032	+ .0022	−21 9 35.41	11.931	.316	+ .057	4	18.13

1460. 7^m5, 19″, 268°.

1461. 12^m4, 2″7, 45°.

1494. 8^m2, 6″3, 253°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1501	BD+31° 627		*9.92*		3 33 54.414	+3.7434	+0.0237	+0.001	+31 59 15.60	+11.930	−0.443	−0.03	[illegible]	18.47
1502	BD− 3° 588	F8	8.8	8.0	34 15.324	3.0197	+ .0073	+ .0027	− 2 49 14.94	11.905	.359	+ .042	[illegible]	17.62
1503	BD+44° 765		*9.59*	9.3	34 22.024	4.1532	+ .0379	− .001	+45 7 55.07	11.898	.493	.00	[illegible]	18.04
1504	BD+26° 590		*8.81*	8.3	34 42.079	3.6204	+ .0201	+ .0047	+26 57 44.69	11.874	.430	− .036	[illegible]	18.29
1505	Wi (1) 3ʰ 560	G5	6.89	6.73	34 49.822	3.3340	+ .0129	.0000	+13 38 1.02	11.865	.396	− .095	4	18.57
1506	BD+17° 601	G5	*8.21*	8.06	3 34 57.949	+3.4255	+ .0151	+ .0136	+18 7 46.12	+11.855	− .407	− .202	4	17.95
1507	Brad 502	G5	6.00	5.92	35 4.064	2.9617	+ .0064	− .0010	− 5 52 54.37	11.848	.353	− .204	4	18.71
1508	Grmb 716	Ma	5.32	5.31	35 11.85	5.1854	+ .0892	− .0009	+62 57 31.76	11.839	.615	+ .021	4	18.05
1509	τ Fornacis	A0	6.08	6.45	35 27.922	2.4939	+ .0024	+ .0009	−28 12 13.30	11.820	.299	+ .032	5	17.82
1510	Wi (2) 3ʰ 665	F2	7.08	7.07	35 34.532	4.0089	+ .0322	− .0033	+40 55 43.09	11.812	.477	+ .084	4	18.72
1511	11 Tauri	A0	6.15	6.20	3 35 59.352	+3.5785	+ .0188	+ .0011	+25 4 18.29	+11.783	− .427	− .015	[illegible]	18.56
1512	CD−29° 1363	K2	8.1	7.79	36 15.546	2.4640	+ .0024	.0000	−29 21 38.30	11.764	.296	− .028	4	18.30
1513	BD+55° 815	G5	*7.98*	7.85	36 37.222	4.6878	+ .0608	+ .006	+56 8 59.50	11.738	.559	.00	4	18.54
1514	BD+38° 788	K0	8.1	7.57	36 44.616	3.9368	+ .0295	− .001	+38 34 3.78	11.729	.470	− .02	4	18.83
1515	BD+ 2° 584	K0	*8.03*	8.02	36 54.778	3.1237	+ .0089	− .0019	+ 2 41 36.60	11.718	.374	− .021	4	18.31
1516	δ Persei	B5	3.10	3.26	3 37 13.279	+4.2585	+ .0413	+ .0032	+47 31 58.86	+11.696	− .509	− .033	5	18.05
1517	BD+ 8° 551		10.7	ft.	37 15.054	3.2461	+ .0110	+ .004	+ 9 4 27.21	11.694	.389	+ .06	4	18.79
1518	BD+31° 637		8.7	9.3	37 16.114	3.7358	+ .0230	+ .0021	+31 25 16.13	11.692	.447	− .046	5	19.59
1519	BD+27° 550	K0	*7.86*	8.30	37 17.293	3.6511	+ .0206	+ .0002	+28 3 4.11	11.691	.437	+ .003	[illegible]	18.63
1520	BD+ 6° 571	G0	*8.38*	8.05	37 32.176	3.2072	+ .0103	− .0007	+ 7 3 43.84	11.673	.385	− .019	4	18.39
1521	BD+22° 532	F2	7.32	7.25	3 37 33.342	+3.5234	+ .0172	.0000	+22 31 57.36	+11.672	− .423	− .085	4	18.56
1522	BD+15° 522	A0	*9.28*		37 55.108	3.3756	+ .0137	.000	+15 33 38.57	11.646	.405	+ .01	4	18.46
1523	BD− 6° 728	K5	9.0	8.87	38 1.825	2.9454	+ .0062	− .002	− 6 40 26.00	11.638	.355	− .03	4	18.50
1524	BD+16° 497	G0	7.17	7.01	38 4.631	3.4062	+ .0143	− .0082	+17 2 16.34	11.635	.410	+ .003	[illegible]	18.32
1525	BD−17° 713		8.8		38 11.360	2.7335	+ .0040	+ .003	−17 18 24.99	11.627	.329	.00	4	17.95
1526	Pi 3ʰ 102	F2	5.84	6.04	3 38 25.50	+5.6332	+ .1152	+ .0164	+66 57 7.98	+11.610	− .674	− .102	12	19.54
1527	BD−18° 656		10.2		38 30.243	2.7027	+ .0037	− .0010	−18 45 29.88	11.604	.326	− .023	4	18.66
1528	BD+12° 504		*8.72*	8.72	38 37.498	3.3203	+ .0124	− .0018	+12 47 57.32	11.596	.400	− .069	[illegible]	18.81
1529	Oelt 4062	A5	6.09	6.10	39 3.894	4.1970	+ .0383	+ .0012	+45 50 52.06	11.565	.504	− .029	5 4	18.15 19.27
1530	δ Fornacis	B5	4.93		39 3.990	2.3855	+ .0023	− .0004	−32 11 36.26	11.564	.288	+ .007	[illegible]	18.93
1531	BD− 9° 733	F2	8.6		3 39 5.035	+2.8977	+ .0056	+ .003	− 9 6 34.17	+11.563	− .350	.00	4	18.75
1532	BD− 0° 587	G5	8.7	8.9	39 8.642	3.0664	+ .0079	+ .0054	− 0 19 53.43	11.559	.370	+ .004	[illegible]	18.74
1533	o Persei m.	B1	3.94	3.93	39 17.820	3.7562	+ .0233	+ .0008	+32 2 9.12	11.548	.453	− .024	[illegible]	19.29
1534	Pulk (55) 529	A2	5.57	5.42	39 20.404	3.8725	+ .0268	+ .0035	+36 12 31.04	11.545	.467	− .035	4	18.89
1535	δ Eridani	K0	3.72	3.67	39 24.879	2.8794	+ .0054	− .0062	−10 2 1.03	11.539	.348	+ .743	67 44	18.72 18.75
1536	Lal 6780	A5	6.80	6.80	3 39 38.807	+4.6236	+ .0563	+ .0002	+54 48 48.35	+11.523	− .557	− .044	[illegible]	18.78
1537	Pi 3ʰ 138	A0	5.70	5.96	39 44.470	2.8653	+ .0053	− .0012	−10 44 17.01	11.516	.347	− .009	[illegible]	19.46
1538	ν Persei	F5	3.93	3.9	39 45.133	4.0690	+ .0333	− .0008	+42 19 37.48	11.515	.491	+ .001	[illegible]	19.06
1539	Lal 6862	F0	6.71	7.02	39 45.159	3.6457	+ .0200	− .0033	+27 38 49.72	11.515	.442	− .070	4	18.02
1540	BD+59° 713	F	*9.10*		40 5.805	4.9357	+ .0717	− .001	+59 33 18.50	11.491	.594	+ .05	4	19.11
1541	17 Tauri	B5	3.81	3.80	3 40 7.246	+3.5571	+ .0177	+ .0014	+23 51 46.50	+11.489	− .430	− .050	4	19.07
1542	24 Eridani	B8	5.09	5.48	40 26.592	3.0456	+ .0076	+ .0009	− 1 24 52.26	11.466	.369	− .009	[illegible]	20.10
1543	Grmb 642	F5	5.84	6.12	40 41.48	20.494	+3.342	+ .165	+86 23 49.60	11.448	2.458	− .071	8	18.53
1544	BD−21° 682	K5	8.0	7.84	40 49.962	2.6436	+ .0033	+ .0010	−21 21 27.71	11.438	.322	− .006	4	18.76
1545	BD+20° 624	A3	*7.64*	7.86	40 51.800	3.4940	+ .0161	+ .0013	+20 59 50.51	11.435	.423	− .061	[illegible]	19.24
1546	BD+34° 728	K0	*9.09*	9.23	3 41 41.812	+3.8490	+ .0256	+ .001	+35 12 18.31	+11.375	− .467	.00	5	17.49
1547	CD−23° 1552	A5	10.2		41 43.375	2.6013	+ .0031	+ .0029	−23 11 30.82	11.374	.317	− .008	[illegible]	19.03
1548	BD+43° 809	B9	7.07	7.02	41 44.460	4.1290	+ .0349	+ .0013	+43 49 34.53	11.372	.500	− .026	[illegible]	18.76
1549	BD+49° 1024	K2	8.02	7.93	41 45.504	4.3897	+ .0450	+ .0014	+50 6 58.48	11.371	.532	− .014	[illegible]	18.99
1550	BD+ 6° 583	K0	6.12	5.6	41 53.093	3.1992	+ .0100	− .0004	+ 6 33 20.43	11.362	.389	− .020	4	18.08
1551	5 H. Camelop	A0	4.67	4.97	3 41 53.26	+6.2860	+ .1593	+ .0060	+71 5 14.96	+11.362	− .760	− .036	[illegible]	20.31
1552	Lac 1213	A3	6.92	6.68	42 10.675	2.5313	+ .0028	− .0023	−26 9 53.44	11.341	.309	+ .016	4	18.28
1553	BD+39° 862	K0	*8.74*	8.7	42 23.222	3.9845	+ .0298	+ .001	+39 35 24.41	11.326	.484	− .04	[illegible]	18.81
1554	BD+10° 481	G5	*8.44*	8.42	42 25.951	3.2858	+ .0116	+ .0075	+10 56 14.21	11.322	.400	− .060	[illegible]	18.03
1555	BD+ 4° 588	A0	*8.93*	8.70	42 36.536	3.1621	+ .0093	− .0013	+ 4 37 58.02	11.310	.386	− .003	4	18.51
1556	η Tauri	B5	2.96	3.11	3 42 43.503	+3.5609	+ .0175	+ .0014	+23 51 32.01	+11.302	− .434	− .048	76 62	20.16 20.19
1557	BD+55° 827	A0	*8.30*	8.21	42 46.000	4.6862	+ .0576	− .001	+55 37 20.71	11.298	.569	− .01	4	18.85
1558	BD−12° 708	G5	9.5		42 49.510	2.8244	+ .0049	+ .0010	−12 40 30.33	11.294	.345	+ .012	5	19.66
1559	BD+14° 609		*8.78*	8.68	42 53.866	3.3541	+ .0129	− .003	+14 17 40.48	11.289	.409	− .01	4	18.86
1560	BD+42° 824	B8	*7.56*	7.35	42 54.351	4.0894	+ .0333	− .002	+42 38 5.94	11.288	.498	− .02	5	18.30

1533. $4^{m}0$-$8^{m}5$, $0''9$, 50°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1561	BD−14° 749	K0	7.70	7.26	3 43 13.413	+2.7822	+0.0045	−0.0017	−14 43 31.85	+11.265	−0.340	−0.001	4	18.47
1562	τ⁶ Eridani	F8	4.33	5.1	43 24.335	2.5922	+ .0032	− .0119	−23 29 6.36	11.252	.318	− .523	4	18.75
1563	BD− 2° 717	F5	9.2	9.2	43 24.820	3.0235	+ .0072	+ .0014	− 2 32 49.95	11.251	.370	− .039	4	18.90
1564	BD+70° 262	A3	7.39	7.5	43 26.46	6.1559	+ .1471	+ .0006	+70 15 54.80	11.250	.747	.000	4	18.85
1565	BD− 5° 749	K0	7.52	6.89	43 49.347	2.9742	+ .0066	+ .0001	− 5 4 58.63	11.222	.364	− .012	4	18.96
1566	BD+25° 620	B9	8.7	8.80	3 43 53.095	+3.6023	+ .0185	− .0004	+25 33 19.67	+11.217	− .440	+ .032	4	19.00
1567	BD+ 1° 663		*8.94*	9.3	44 8.326	3.1075	+ .0084	− .0007	+ 1 47 59.08	11.199	.381	− .014	4	18.33
1568	τ⁷ Eridani	A2	5.04	5.51	44 13.170	2.5763	+ .0031	+ .0032	−24 7 19.14	11.193	.317	+ .054	4	19.16
1569	CD−27° 1394	K2	8.5	7.7	44 17.923	2.4972	+ .0028	+ .0011	−27 25 50.65	11.187	.307	+ .010	4	19.10
1570	27 Tauri *m.*	B8	3.80	3.80	44 24.054	3.5622	+ .0174	+ .0014	+23 48 35.60	11.180	.436	− .050	5	17.53
1571	Wi (1) 3ʰ 790	K0	6.10	5.79	3 44 32.558	+3.0724	+ .0079	+ .0037	− 0 1 1.24	+11.170	− .376	− .002	4	18.53
1572	BD− 6° 754	G0	8.8	8.50	44 37.543	2.9447	+ .0062	− .005	− 6 34 42.25	11.164	.362	− .02	4	17.94
1573	BD+60° 754	G5	*8.34*	8.46	44 43.40	5.0858	+ .0767	− .003	+61 7 21.41	11.157	.621	− .02	4	19.07
1574	BD+57° 749	G0	*9.00*	8.6	44 54.576	4.8229	+ .0631	− .004	+57 35 46.73	11.143	.589	− .01	4	18.45
1575	BD+79° 116		*9.32*		45 1.68	8.9190	+ .4248	− .0016	+79 14 17.01	11.134	1.086	− .007	4	18.76
1576	Lal 7098	K0	6.06	5.81	3 45 4.327	+2.6428	+ .0034	− .0014	−21 8 49.73	+11.131	− .326	− .038	4	18.80
1577	BD+49° 1037	F5	8.9	9.20	45 7.348	4.3619	+ .0427	− .005	+49 13 55.75	11.128	.533	.00	4	18.72
1578	BD+29° 632	A0	7.9	7.70	45 13.312	3.6992	+ .0208	− .0015	+29 24 5.82	11.120	.454	− .012	4	18.40
1579	BD+12° 512		*9.51*		45 13.962	3.3258	+ .0121	+ .001	+12 49 25.58	11.120	.408	+ .02	4	18.66
1580	BD+65° 373	G0	7.35	7.14	45 19.54	5.4897	+ .0994	− .0014	+65 17 26.58	11.113	.671	+ .018	5	18.78
1581	BD+ 8° 574	B9	6.75	7.0	3 45 25.828	+3.2522	+ .0108	+ .002	+ 9 9 53.38	+11.105	− .400	− .02	4	17.80
1582	BD+ 3° 528		*9.61*		45 41.170	3.1476	+ .0090	− .0073	+ 3 50 56.91	11.087	.387	− .025	4	19.00
1583	BD+15° 537	F5	8.5	8.8	45 41.629	3.3869	+ .0134	+ .001	+15 45 27.65	11.086	.416	+ .01	4	18.80
1584	BD+18° 546	F0	*8.39*	8.38	45 46.494	3.4564	+ .0148	−.0018	+19 0 43.25	11.080	.424	.000	4	18.30
1585	BD−17° 735		9.3		45 51.185	2.7347	+ .0040	+ .003	−16 52 55.26	11.074	.336	− .03	5	17.66
1586	BD+64° 412	F8	*7.85*	7.84	3 46 21.95	+5.4088	+ .0936	+ .0009	+64 28 29.29	+11.037	− .663	− .023	4	19.10
1587	BD−10° 757	F5	8.4	7.88	46 36.141	2.8646	+ .0053	− .0026	−10 33 40.71	11.020	.354	− .002	5	17.68
1588	BD+ 0° 663	F8	*9.15*	8.7	46 41.814	3.0877	+ .0080	− .0001	+ 0 46 8.06	11.013	.381	+ .017	4	18.22
1589	BD+33° 727	G5	*9.45*		46 45.384	3.8190	+ .0238	.000	+33 45 9.60	11.008	.470	.00	5	18.04
1590	BD+47° 904		*8.71*	8.22	46 48.389	4.3076	+ .0400	− .001	+47 52 17.37	11.005	.530	.00	4	18.32
1591	BD− 9° 760		9.3	9.5	3 47 8.577	+2.8989	+ .0056	− .001	− 8 50 10.54	+10.980	− .358	− .01	4	18.35
1592	Lal 7019	A0	5.79	5.88	47 12.866	4.8442	+ .0628	+ .0118	+57 44 19.48	10.975	.596	− .079	4	18.73
1593	BD+52° 720	F8	*8.10*	8.85	47 33.144	4.5224	+ .0482	+ .0121	+52 19 37.01	10.950	.557	− .103	4	18.57
1594	BD+37° 835	K2	*9.52*		47 40.894	3.9480	+ .0274	+ .003	+38 0 52.81	10.941	.486	− .03	8	[illegible]
1595	Brad 535	B9	5.62	5.72	47 44.126	3.1963	+ .0097	.0000	+ 6 17 43.13	10.937	.395	− .007	4	17.93
1596	CD−29° 1448	K2	7.79	7.05	3 47 44.552	+2.4354	+ .0026	− .0005	−29 38 28.08	+10.936	− .302	+ .006	4	18.87
1597	BD+46° 815	G5	8.0	7.20	47 46.446	4.2598	+ .0379	− .0025	+46 39 55.55	10.934	.525	+ .042	4	17.50
1598	CD−26° 1453	F8	10.4	ft.	48 0.687	2.5218	+ .0029	+ .0234	−26 10 33.35	10.917	.312	+ .138	4	19.56
1599	BD+27° 586	M0	8.8	8.30	48 4.558	3.6509	+ .0191	+ .0013	+27 17 8.65	10.912	.451	+ .014	5	19.40
1600	BD+24° 589	F8	9.23		48 6.147	3.5831	+ .0174	+ .0038	+24 28 41.44	10.910	.442	− .056	4	18.02
1601	BD+69° 230		*9.02*		3 48 21.49	+6.0921	+ .1360	+ .0340	+69 37 2.29	+10.891	− .750	− .176	4	18.65
1602	CD−23° 1601		9.2		48 30.540	2.5979	+ .0032	+ .0002	−22 55 54.19	10.880	.322	− .022	5	18.41
1603	Pi 3ʰ 187	F0	5.96	6.2	48 35.343	3.4178	+ .0137	+ .0100	+17 5 23.39	10.874	.422	− .033	4	18.42
1604	BD+22° 588	K2	*8.21*	7.91	48 36.818	3.5466	+ .0164	+ .0014	+22 53 8.93	10.872	.440	+ .025	4	18.38
1605	ζ Persei	B1	2.91	3.25	49 5.910	3.7656	+ .0219	+ .0010	+31 38 50.04	10.837	.467	− .017	19 21	23.38 23.22
1606	BD− 2° 747 *br.*	F0	8.3	8.2	3 49 9.143	+3.0288	+ .0072	− .0006	− 2 14 5.51	+10.833	− .376	− .009	4	18.02
1607	Wi (1) 3ʰ 892	B9	6.55	6.88	49 13.171	2.9372	+ .0060	+ .0005	− 6 52 16.09	10.828	.364	− .013	5	17.85
1608	BD+41° 773		8.6	8.67	49 15.586	4.0745	+ .0311	+ .007	+41 41 26.21	10.825	.505	− .05	4	18.08
1609	BD+10° 501		*9.58*		49 26.469	3.2765	+ .0110	− .003	+10 15 47.73	10.812	.407	− .07	4	18.10
1610	Lal 7222	F2	6.37	6.5	49 37.381	2.6922	+ .0038	+ .0010	−18 40 17.41	10.798	.335	+ .003	4	18.80
1611	BD+62° 626		*9.60*		3 49 38.83	+5.2124	+ .0799	+ .002	+62 14 45.93	+10.796	− .645	− .02	4	18.14
1612	BD+ 7° 564		9.3		49 40.438	3.2226	+ .0100	− .004	+ 7 34 47.14	10.794	.401	− .02	4	17.97
1613	BD−14° 772	A2	8.2	7.60	50 14.164	2.7867	+ .0046	+ .001	−14 13 50.40	10.753	.348	.00	4	18.48
1614	BD−12° 744	G5	7.44	7.67	50 14.272	2.8189	+ .0049	− .0030	−12 41 6.24	10.751	.352	+ .006	4	18.39
1615	9 H Camelop *br.*	•	5.28	5.03	50 18.17	5.0974	+ .0735	+ .0004	+60 52 33.71	10.748	.632	− .016	4	17.85
1616	Wi (2) 3ʰ 1010	B0	Var.	6.93	3 50 22.735	+3.7456	+ .0212	− .0008	+30 48 40.99	+10.742	− .466	− .018	4	18.30
1617	BD+82° 105	F5	*8.82*	9.2	50 22.83	11.8081	+ .8324	+ .0073	+82 38 26.53	10.742	1.457	− .029	4	18.19
1618	BD+40° 856	B9	9.2		50 27.957	4.0397	+ .0296	.000	+40 35 34.80	10.736	.502	− .01	5	17.92
1619	BD+54° 722	A0	*9.40*		50 28.566	4.6042	+ .0529	− .001	+54 39 29.50	10.735	.579	− .02	4	18.24
1620	BD− 4° 699	G5	8.10	7.69	50 35.443	2.9860	+ .0066	− .0011	− 4 23 35.10	10.727	.372	− .008	5	16.70

1570. $3^{m}9$ 9^{m}, 0″.5, 47°.

1606. $10^{m}0$, 5″.0, 60°.

1615. K0, A0; $5^{m}2$, 1″.9, 46°.

1616. $6^{m}2$ to $6^{m}9$.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1621	υ^{3} Eridani	B5	5.12		3 50 36.032	+2.2832	+0.0027	+0.0028	−34 58 6.06	+10.726	−0.287	−0.018	4	19.43
1622	BD+18° 558		*8.84*	8.4	50 42.458	3.4648	+ .0145	+ .011	+19 8 55.53	10.718	.431	− .10	4	18.06
1623	BD+36° 782	K0	*9.38*		50 45.781	3.9070	+ .0256	+ .002	+36 27 3.47	10.714	.486	− .04	4	18.55
1624	CD−27° 1444		9.9		50 59.336	2.4798	+ .0028	− .0032	−27 41 4.74	10.697	.312	− .012	5	20.13
1625	BD+58° 672	F8	*8.08*	7.75	51 53.649	4.9135	+ .0635	+ .006	+58 23 21.41	10.630	.613	− .05	4	18.16
1626	BD+78° 137		*8.48*	8.32	3 52 1.92	+8.8105	+ .3845	+ .0014	+78 49 34.67	+10.620	−1.094	− .003	6	19.49
1627	Wi (1) 3^{h} 943	K0	7.40	7.17	52 26.912	3.1287	+ .0084	+ .0020	+ 2 49 33.62	10.589	.391	+ .004	4	18.12
1628	ε Persei *br.*	B1	2.96	3.30	52 28.764	4.0175	+ .0285	+ .0023	+39 46 48.04	10.587	.502	− .029	8	21.20
1629	Wi (2) 3^{h} 1060	K0	6.38	6.85	52 39.122	3.5837	+ .0168	+ .0002	+24 13 51.72	10.574	.449	− .016	4	18.14
1630	CD−28° 1339	K5	9.7		52 49.865	2.4555	+ .0028	+ .0024	−28 31 16.52	10.561	.308	− .021	4	18.79
1631	BD+ 6° 607	A0	8.5	8.39	3 53 21.318	+3.2052	+ .0096	− .001	+6 38 37.29	+10.522	− .402	+ .01	4	18.35
1632	BD+20° 672	F8	*9.36*	9.3	53 21.356	3.4968	+ .0149	+ .002	+20 26 52.73	10.522	.438	− .05	4	18.50
1633	BD−16° 741		8.8	8.3	53 31.383	2.7394	+ .0042	+ .0008	−16 19 31.01	10.509	.344	+ .004	5	17.86
1634	BD+51° 820	K5	*9.33*		53 38.905	4.5000	+ .0450	− .004	+51 25 30.69	10.500	.563	− .04	4	19.11
1635	BD+17° 660		*9.22*	8.53	53 39.056	3.4442	+ .0138	− .001	+18 4 25.12	10.500	.432	+ .01	4	18.57
1636	BD+59° 743	F0	*8.78*	9.5	3 53 42.668	+4.9910	+ .0661	− .003	+59 18 38.22	+10.495	− .624	− .06	4	18.74
1637	ξ Persei	O5	4.05	4.53	53 46.109	3.8868	+ .0244	+ .0011	+35 33 44.04	10.491	.487	− .012	4 5	18.35 17.69
1638	BD+11° 548 *m.*	G5	*8.99*	9.4	54 1.906	3.3127	+ .0114	− .001	+11 53 35.45	10.471	.417	.00	4	19.16
1639	BD+80° 123	A0	*8.00*	7.8	54 2.53	10.0744	+ .5373	− .0046	+80 45 19.21	10.470	1.257	− .004	4	18.03
1640	BD+31° 677	K7	8.9	9.2	54 3.107	3.7788	+ .0215	− .0005	+31 47 1.15	10.470	.474	− .009	4	19.20
1641	BD+72° 204	G5	*8.05*	7.78	3 54 10.67	+6.7113	+ .1735	+ .0140	+72 36 16.61	+10.460	− .839	− .003	4	18.86
1642	BD+39° 902	M0	9.1	8.70	54 11.028	4.0221	+ .0283	+ .005	+39 47 17.61	10.460	.504	− .01	4	18.65
1643	BD−20° 749	K0	8.9	8.83	54 11.407	2.6465	+ .0037	+ .0060	−20 29 59.42	10.459	.334	+ .113	5	18.28
1644	BD+45° 858	A0	*8.81*	8.83	54 16.004	4.2318	+ .0349	.000	+45 28 14.34	10.454	.531	− .01	4	19.12
1645	γ Eridani	K5	3.19	3.09	54 17.751	2.7940	+ .0046	+ .0046	−13 44 7.00	10.451	.352	− .112	81 71	19.34 19.36
1646	BD+ 8° 605		*8.56*	8.80	3 54 26.316	+3.2493	+ .0102	− .0017	+ 8 47 52.34	+10.441	− .409	− .007	4	18.81
1647	BD+47° 923	A2	8.2	8.40	54 34.197	4.3113	+ .0376	+ .002	+47 20 43.04	10.431	.541	− .02	5 4	17.62 18.58
1648	Wi (1) 3^{h} 998	G5	7.33	6.93	54 51.199	3.3521	+ .0120	.0000	+13 44 55.35	10.410	.422	− .063	4	18.16
1649	BD+68° 301	F8	*8.72*	8.74	55 1.43	6.0424	+ .1245	+ .0028	+68 57 24.14	10.397	.757	− .066	4	18.56
1650	BD+ 3° 546	K2	*8.3*	8.47	55 15.686	3.1438	+ .0086	+ .0008	+ 3 33 24.75	10.379	.396	− .010	4	18.29
1651	BD− 0° 626	F8	8.5	9.2	3 55 20.422	+3.0601	+ .0074	+ .0007	− 0 38 0.46	+10.373	− .386	− .084	4	17.96
1652	BD− 8° 765	K	9.3		55 21.784	2.9147	+ .0057	+ .002	− 7 52 4.20	10.372	.367	+ .02	4	18.54
1653	BD−10° 808 *m.*	G0	8.4	8.2	55 47.722	2.8595	+ .0052	+ .0025	−10 33 0.28	10.339	.362	+ .020	4	16.97
1654	BD+33° 758	A3	*9.34*		55 59.210	3.8236	+ .0223	+ .003	+33 14 46.58	10.325	.482	− .06	5	17.53
1655	BD+53° 723	B3	*8.50*	8.7	56 4.374	4.6227	+ .0488	− .001	+53 31 44.97	10.319	.582	.00	4	18.55
1656	BD−18° 717	K5	7.70	7.34	3 56 10.546	+2.6973	+ .0040	+ .0030	−18 8 19.73	+10.311	− .341	+ .054	4	18.90
1657	λ Tauri	B3	Var.	3.9	56 14.704	3.3219	+ .0114	− .0004	+12 15 55.22	10.306	.420	− .014	4	18.68
1658	BD+28° 609	A0	6.99	7.13	56 29.894	3.6897	+ .0189	+ .0043	+28 16 41.88	10.287	.464	− .003	4	17.94
1659	BD+42° 865		9.4	8.7	56 30.772	4.1373	+ .0312	− .001	+42 52 0.15	10.286	.522	+ .01	4	18.70
1660	BD+55° 844	F2	7.78	7.48	56 31.938	4.7753	+ .0548	+ .004	+56 1 52.39	10.284	.602	− .07	4	18.20
1661	BD+22° 621	F5	*8.02*	7.43	3 57 31.787	+3.5420	+ .0155	− .0050	+22 12 2.81	+10.209	− .449	− .042	5	19.20
1662	BD+41° 799		9.2		57 40.671	4.0815	+ .0292	.000	+41 14 47.88	10.198	.516	− .09	4	18.54
1663	Schwerd 215	K0	6.72	6.45	57 41.85	7.0286	+ .1928	+ .0060	+73 46 59.87	10.197	.886	− .067	8	17.89
1664	CD−26° 1521	F5	7.46	7.0	58 0.899	2.4926	+ .0030	+ .0050	−26 44 24.57	10.173	.318	+ .013	4	18.46
1665	BD− 2° 777	F5	7.9	7.78	58 13.789	3.0354	+ .0070	+ .0032	− 1 51 15.23	10.156	.385	− .038	4	17.93
1666	BD− 4° 721	F8	9.2	9.4	3 58 14.038	+2.9868	+ .0064	− .0004	− 4 15 57.49	+10.156	− .379	− .032	5	17.73
1667	BD+14° 643	F8	*8.59*	8.56	58 36.782	3.3659	+ .0120	+ .0014	+14 15 45.06	10.128	.428	+ .002	4	18.08
1668	BD+ 1° 694	G5	*9.0*		58 38.460	3.1055	+ .0079	+ .0120	+ 1 37 44.91	10.125	.395	− .059	4	17.91
1669	CD−24° 2049	G5	9.5		58 53.320	2.5427	+ .0032	− .0003	−24 39 57.05	10.107	.324	− .078	4	18.32
1670	ν Tauri	A0	3.94	3.92	58 53.903	3.1893	+ .0091	+ .0001	+ 5 46 6.20	10.106	.406	− .007	92 70	19.12 19.04
1671	BD+26° 669	G	9.1	9.10	3 59 4.508	+3.6429	+ .0175	− .0010	+26 16 49.72	+10.092	− .463	− .024	4 5	18.65 17.93
1672	BD−16° 765		9.0	8.9	59 4.623	2.7327	+ .0042	− .0020	−16 24 31.77	10.092	.348	+ .044	4	18.32
1673	Oelt 4402	B2	6.75	6.19	59 6.97	5.2338	+ .0743	+ .0010	+61 53 0.91	10.089	.663	+ .007	4	17.78
1674	BD−22° 735	G5	9.2		59 16.615	2.6013	+ .0035	+ .0028	−22 11 53.65	10.077	.332	+ .017	5	17.95
1675	BD−12° 780	G5	9.8		59 19.959	2.8262	+ .0049	+ .0030	−12 2 37.52	10.073	.360	+ .048	4	18.47
1676	BD+48° 1038	A3	9.2		3 59 22.006	+4.3835	+ .0385	+ .001	+48 36 11.04	+10.071	− .557	− .04	4	18.48
1677	BD+29° 665	A5	*9.51*	8.8	59 22.056	3.7275	+ .0194	+ .0001	+29 32 25.24	10.071	.474	+ .005	4	18.10
1678	BD+43° 886	B2	*9.22*	8.7	59 31.522	4.1913	+ .0321	− .004	+44 3 34.33	10.059	.532	− .02	4	17.83
1679	BD+36° 813	A0	*8.24*	7.80	59 41.651	3.9400	+ .0247	.000	+36 52 11.16	10.046	.501	− .08	5	17.31
1680	*A* Tauri	K0	4.50	4.78	3 59 57.706	3.5371	+ .0151	+ .0067	+21 51 52.05	10.025	.451	− .064	4	18.09

1628. $7^{m}03$, 8″6, 10°.

1638. $9^{m}4$–$10^{m}1$, 0″9, 331°.

1653. $9^{m}1$–$9^{m}3$, 0″4, 319°.

1657. $3^{m}8$ to $4^{m}2$.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1681	BD+16° 554	F0	*9.20*		4 0 3.997	+3.4136	+0.0128	−0.0001	+16 24 31.74	+10.017	−0.435	−0.016	5	17.83
1682	λ Persei	A0	4.33	4.90	0 36.984	4.4607	+ .0408	− .0003	+50 8 7.72	9.976	.568	− .037	4	18.71
1683	Lal 7600	G5	5.67	5.79	0 38.077	2.8049	+ .0048	+ .0005	−13 0 40.72	9.975	.359	+ .011	4	18.01
1684	BD+34° 810	K0	*8.93*	8.80	0 44.197	3.8603	+ .0223	+ .015	+34 11 11.03	9.967	.493	− .15	5	17.59
1685	BD− 6° 813		9.9		1 6.591	2.9462	+ .0061	+ .002	− 6 13 17.20	9.938	.376	− .11	4	18.23
1686	BD+24° 620	M0	*8.94*	8.7	4 1 15.961	+3.6022	+ .0163	− .0011	+24 30 57.79	+ 9.927	− .461	− .032	4	18.38
1687	BD− 7° 737	K0	8.7	7.97	1 16.210	2.9166	+ .0058	.000	− 7 39 21.78	9.926	.374	+ .02	4	19.00
1688	BD−18° 742		9.1		1 17.376	2.6916	+ .0040	+ .007	−18 10 14.75	9.925	.345	− .07	4	19.10
1689	BD+10° 537 *pr.*	F5	8.9	8.44	1 29.034	3.2934	+ .0105	− .001	+10 45 30.69	9.910	.422	− .06	5	18.29
1690	BD+60° 780	B9	7.46	7.5	1 30.90	5.1397	+ .0681	− .0011	+60 39 44.99	9.908	.657	+ .004	4	17.99
1691	BD+ 4° 632	F5	*8.60*	8.7	4 1 47.272	+3.1638	+ .0086	− .0015	+ 4 28 43.51	+ 9.887	− .405	− .034	4	19.17
1692	BD+38° 841	F0	*8.96*	8.4	1 47.648	3.9888	+ .0256	.000	+38 14 23.83	9.886	.509	− .03	5	18.51
1693	BD+21° 591	K2	*8.02*	7.76	1 50.660	3.5363	+ .0149	− .001	+21 44 26.55	9.883	.452	+ .01	4	18.35
1694	BD+63° 485		*8.44*	9.16	1 56.22	5.4186	+ .0814	+ .001	+63 37 51.22	9.876	.692	− .09	4	19.32
1695	ψ Tauri	F0	5.29	5.40	2 3.438	3.7118	+ .0186	− .0062	+28 47 9.92	9.866	.474	+ .003	4	18.93
1696	BD+69° 240	G5	8.09	7.32	4 2 13.56	+6.2905	+ .1316	+ .0039	+70 7 1.59	+ 9.854	− .803	+ .010	4	19.09
1697	174 G Eridani	A5	5.57	5.5	2 19.513	2.4572	+ .0030	+ .0147	−27 52 11.96	9.846	.318	+ .103	5	19.37
1698	BD+83° 100		*8.65*	8.6	2 22.11	13.6141	+1.0468	− .0187	+83 41 52.85	9.843	1.733	+ .026	4 5	19.28 18.79
1699	Wi (2) 3^{h} 1242	B8	6.67	6.8	2 39.401	4.1582	+ .0302	− .0006	+42 58 41.17	9.821	.533	− .025	4	18.94
1700	BD−19° 820	K5	7.63	7.38	2 43.702	2.6549	+ .0037	+ .0003	−19 43 40.60	9.815	.342	− .040	4	18.99
1701	BD+13° 646	A3	*7.73*	7.9	4 2 50.637	+3.3487	+ .0114	− .002	+13 19 27.42	+ 9.806	− .430	.00	4	18.08
1702	c Persei	B3	4.03	4.47	2 50.785	4.3447	+ .0361	+ .0032	+47 30 0.90	9.806	.557	− .030	4	18.39
1703	Brad 561	F8	5.59	5.33	3 16.345	3.9788	+ .0249	+ .0136	+37 49 54.30	9.774	.510	− .203	5	17.66
1704	Lal 7711 *m.*	A3	6.58	6.64	3 30.203	2.5961	+ .0035	+ .0002	−22 12 27.85	9.756	.335	− .021	5	17.53
1705	BD+15° 586	M0	*9.43*	9.5	3 35.208	3.4034	+ .0122	− .002	+15 48 44.87	9.750	.437	+ .01	4	18.21
1706	BD−11° 802	K2	9.7		4 3 48.016	+2.8331	+ .0050	.0000	−11 35 23.37	+ 9.733	− .365	+ .018	5	16.80
1707	BD+ 5° 592		9.2		3 54.852	3.1940	+ .0090	− .003	+ 5 55 34.30	9.725	.412	+ .04	4	17.44
1708	BD+54° 742	A2	*8.74*	8.65	4 3.833	4.7099	+ .0486	+ .001	+54 28 19.11	9.713	.605	+ .01	4	18.58
1709	43 Tauri	G5	5.67	5.70	4 30.120	3.4848	+ .0137	+ .0075	+19 23 55.71	9.680	.449	− .043	4 5	18.13 17.51
1710	BD+67° 311	K0	*7.80*	8.02	4 30.12	5.9376	+ .1073	− .0035	+67 46 55.55	9.680	.762	+ .005	4	17.93
1711	BD+52° 779	G5	*8.20*	8.20	4 4 30.592	+4.6224	+ .0451	+ .002	+52 56 33.43	+ 9.679	− .595	− .02	5	18.14
1712	BD+75° 165	G5	8.84	8.9	4 38.32	7.7916	+ .2414	+ .0022	+76 4 5.04	9.669	1.000	− .032	4	18.90
1713	BD− 0° 648	F8	7.8	7.66	5 2.703	3.0721	+ .0073	+ .0041	− 0 1 55.80	9.638	.397	+ .014	4	18.29
1714	BD+42° 910	A0	9.2		5 11.759	4.1723	+ .0300	− .002	+43 10 12.61	9.627	.538	+ .02	4	18.31
1715	BD+30° 626	K0	*8.47*	8.30	5 16.659	3.7616	+ .0192	+ .0010	+30 26 20.98	9.620	.485	− .029	4	18.08
1716	BD−13° 820	K5	9.2	8.6	4 5 23.544	+2.7912	+ .0047	.0000	−13 29 54.68	+ 9.611	− .362	− .008	4	18.57
1717	BD+ 2° 655	F2	6.51	6.5	5 32.132	3.1365	+ .0081	− .0036	+ 3 6 51.49	9.600	.406	− .066	4	15.98
1718	BD− 2° 820	K0	8.4	8.01	5 33.061	3.0339	+ .0069	+ .0051	− 1 53 36.44	9.599	.392	− .035	4	18.23
1719	BD− 9° 825	G0	8.94	8.58	5 34.832	2.8730	+ .0053	− .0030	− 9 39 39.16	9.597	.372	+ .056	6	17.60
1720	Wi (1) 4 29	A0	6.80	6.86	5 49.262	2.9951	+ .0065	− .0005	− 3 46 59.27	9.579	.388	+ .005	4	19.02
1721	CD−24° 2120	K2	9.7		4 5 49.278	+2.5452	+ .0033	+ .0044	−24 11 53.11	+ 9.578	− .330	+ .006	4	18.75
1722	BD+11° 581	K0	*8.64*	8.06	5 54.854	3.3194	+ .0107	+ .009	+11 52 0.17	9.572	.430	+ .10	4	18.51
1723	p Tauri	F0	5.55	5.88	5 57.291	3.6524	+ .0168	− .0020	+26 16 23.49	9.568	.472	− .037	4	18.33
1724	BD+ 8° 644	B9	8.2	8.39	6 0.212	3.2421	+ .0096	+ .001	+ 8 12 21.30	9.564	.420	.00	4	18.75
1725	BD+46° 849	A2	9.2	8.9	6 9.848	4.3215	+ .0342	− .002	+46 44 51.30	9.552	.558	− .03	4	18.52
1726	BD+66° 312	K5	*8.40*	8.54	4 6 31.58	+5.7569	+ .0950	+ .0030	+66 20 34.46	+ 9.524	− .742	+ .040	4	18.93
1727	BD+34° 829	A0	7.62	7.77	6 50.944	3.9014	+ .0223	.000	+35 9 10.78	9.500	.505	− .01	4	18.92
1728	Brad 566	F0	5.71	6.02	7 4.600	3.1823	+ .0087	+ .0095	+ 5 18 57.19	9.482	.411	+ .013	5	19.64
1729	BD+31° 719	A0	*8.31*	8.28	7 8.054	3.8080	+ .0200	+ .0015	+31 58 50.96	9.477	.494	− .029	4	18.31
1730	BD−16° 804		10.1		7 9.899	2.7323	+ .0043	− .0018	−16 7 27.64	9.475	.355	+ .005	4	18.98
1731	CD−26° 1582	G5	8.1	7.61	4 7 10.214	+2.4917	+ .0032	− .0008	−26 15 34.78	+ 9.475	− .324	+ .002	4	19.49
1732	BD+25° 682	F5	*8.89*	8.44	7 36.694	3.6436	+ .0163	+ .0015	+25 50 24.26	9.441	.472	+ .011	5	18.65
1733	BD+79° 136	A2	*9.10*		7 43.97	9.2385	+ .3735	+ .0057	+79 10 23.11	9.432	1.192	− .018	4	18.48
1734	Rad (45) 1158	G5	7.28	6.53	7 45.836	4.4240	+ .0370	− .0001	+48 53 23.02	9.429	.573	− .015	4	18.98
1735	ο¹ Eridani	F2	4.14	4.21	7 57.533	2.9269	+ .0057	+ .0006	− 7 2 43.02	9.413	.381	+ .081	50 41	18.60 18.73
1736	BD+17° 694	K2	*8.44*	8.23	4 8 1.925	+3.4477	+ .0126	.000	+17 37 46.80	+ 9.408	− .448	.00	4 5	18.90 18.49
1737	BD− 5° 848		9.4	9.5	8 18.058	2.9532	+ .0050	− .002	− 5 46 53.02	9.387	.384	− .01	4	18.03
1738	Lal 7880	K0	6.58	7.01	8 23.975	2.7008	+ .0041	− .0001	−17 28 44.09	9.380	.352	− .060	4	17.94
1739	BD+ 0° 711	F8	9.2	8.48	8 26.170	3.0843	+ .0074	+ .0048	+ 0 33 49.11	9.373	.401	+ .003	4	18.84
1740	BD+44° 881	A5	*8.68*	7.90	8 32.898	4.2356	+ .0309	+ .001	+44 32 48.77	9.368	.550	.05	5	18.06

1689. $9^{m}5$, $2''7$, 111°.

1704. $7^{m}2$-$7^{m}6$, $0''3$, 132°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1741	BD+13° 654	F8	*9.90*		4 8 53.912	+3.3539	+0.0110	0.000	+13 22 31.15	+9.341	−0.437	0.00	4	19.00
1742	BD+27° 648	G5	*10.06*		8 56.618	3.6818	+ .0170	.000	+27 15 9.95	9.338	.479	.00	4	19.11
1743	μ Persei	G0	4.28	4.3	9 0.981	4.3958	+ .0356	+ .0013	+48 12 26.91	9.332	.571	− .027	4	18.64
1744	BD+22° 654	A0	8.08	8.30	9 13.490	3.5630	+ .0146	+ .001	+22 30 19.01	9.316	.465	+ .01	4 5	18.67 17.95
1745	Grmb 766	B3	5.39	5.51	9 30.43	13.6573	+ .9791	− .0010	+83 37 2.04	9.294	1.768	+ .014	8	18.28
1746	BD+19° 679	F8	*8.32*	8.08	4 9 41.241	+3.4893	+ .0133	+ .001	+19 22 43.41	+9.280	− .455	− .04	4	18.09
1747	CD−28° 1457 *m.*	F8	7.44	8.1	9 46.142	2.4229	+ .0031	+ .0065	−28 44 41.15	9.274	.317	+ .055	4	17.96
1748	BD−19° 852		9.4		9 57.786	2.6521	+ .0038	+ .0005	−19 32 13.09	9.259	.346	+ .052	4	19.06
1749	BD+74° 196	A5	8.67	8.98	10 8.85	7.5047	+ .2051	+ .0031	+75 1 18.81	9.244	.975	+ .011	5	18.03
1750	BD+33° 822	K0	*9.41*		10 24.732	3.8520	+ .0204	+ .002	+33 17 47.95	9.224	.503	− .01	4	19.06
1751	Pi 4ʰ 7	A2	5.12	5.56	4 10 28.141	+4.6712	+ .0443	− .0001	+53 24 44.82	+9.219	− .608	− .004	5	17.64
1752	*A* Eridani *br.*	K0	5.17	4.93	10 35.288	2.8537	+ .0051	− .0008	−10 27 14.65	9.210	.374	− .157	4	18.66
1753	BD+ 4° 659		*9.08*		10 43.042	3.1695	+ .0083	+ .0012	+ 4 39 40.31	9.200	.415	− .032	4	18.40
1754	BD− 7° 776	A3	9.2	8.5	10 55.214	2.9187	+ .0056	+ .002	− 7 23 16.66	9.184	.382	+ .04	4	18.86
1755	Grmb 750	F8	6.70		10 55.63	17.657	+1.764	+ .016	+85 20 37.38	9.184	2.290	+ .033	155 139	20.02 19.87
1756	BD+50° 963	K2	6.88	6.6	4 11 9.183	+4.5230	+ .0388	− .0012	+50 40 2.94	+9.166	− .591	+ .002	4	18.54
1757	BD+ 5° 613	G0	7.16	6.99	11 10.249	3.1977	+ .0086	− .0079	+ 6 0 8.24	9.165	.418	− .120	5	18.06
1758	μ Tauri	B3	4.32	4.72	11 11.292	3.2544	+ .0094	+ .0019	+ 8 41 35.11	9.163	.426	− .020	5	19.21
1759	BD+28° 634	A7	*9.57*		11 12.055	3.7294	+ .0179	− .003	+28 55 19.10	9.162	.488	+ .04	4	18.32
1760	BD− 9° 856	K5	8.76	8.20	11 24.286	2.8696	+ .0052	.0000	− 9 41 27.14	9.147	.377	− .080	5	17.78
1761	BD+45° 904	Bp	8.6	7.72	4 11 30.846	+4.3058	+ .0320	− .002	+46 1 57.44	+9.138	− .562	+ .01	4	18.74
1762	o² Eridani	G5	4.48	4.72	11 35.706	2.9103	+ .0055	− .1489	− 7 46 27.54	9.132	.382	−3.430	4	17.70
1763	BD−22° 782	G0	9.1		11 40.576	2.5875	+ .0036	+ .0051	−22 11 9.30	9.126	.339	− .001	5	18.33
1764	BD+39° 965	K0	9.1	9.2	12 20.524	4.0746	+ .0255	.000	+40 3 26.75	9.073	.533	.00	6	[illegible]
1765	BD+71° 247		*9.12*	8.8	12 22.50	6.7149	+ .1449	+ .0026	+71 52 57.20	9.071	.877	+ .012	4	18.06
1766	BD+10° 554	G0	*9.41*		4 12 39.470	+3.2931	+ .0098	+ .002	+10 28 16.18	+9.049	− .432	− .09	4	18.66
1767	BD− 1° 609	K0	8.8	8.33	12 41.403	3.0448	+ .0068	− .0010	− 1 20 28.19	9.043	.400	+ .005	4 5	18.53 18.20
1768	BD−13° 848	K5	8.1	8.1	12 45.846	2.7890	+ .0046	.0000	−13 22 51.43	9.041	.367	− .079	4	19.03
1769	BD+37° 906 *br.*	F0	*8.48*	8.50	13 2.189	3.9846	+ .0230	.000	+37 22 53.09	9.019	.524	− .02	6 5	19.06 18.92
1770	BD+29° 688	K0	*9.32*	9.3	13 11.425	3.7658	+ .0180	− .001	+30 8 15.68	9.007	.495	− .02	4	17.99
1771	BD+58° 732	A2	9.4		4 13 12.174	+5.0146	+ .0557	+ .004	+58 25 0.18	+9.006	− .657	− .02	4	18.41
1772	BD+17° 702	G5	*8.63*	8.93	13 17.759	3.4424	+ .0121	− .002	+17 12 13.33	8.999	.452	− .02	4	18.99
1773	Brad 576	A5	5.56	5.56	13 38.957	3.5407	+ .0137	+ .0075	+21 23 5.53	8.972	.466	− .039	4	18.52
1774	BD+73° 222	A5	*8.80*	8.8	13 57.85	7.1664	+ .1725	− .0013	+73 42 56.83	8.947	.942	− .020	4	19.00
1775	CD−24° 2218	K0	9.1		14 17.399	2.5400	+ .0034	− .0012	−23 59 37.09	8.921	.335	+ .008	4	18.56
1776	BD+63° 494	K0	*7.90*	7.88	4 14 20.38	+5.4881	+ .0750	− .001	+63 38 29.33	+8.917	− .720	.00	5	18.03
1777	BD+ 8° 665		*9.42*		14 22.040	3.2569	+ .0092	+ .002	+ 8 44 51.67	8.915	.429	− .02	4	18.57
1778	BD+25° 700	A0	8.0	8.90	14 31.114	3.6578	+ .0157	− .0031	+26 2 43.87	8.904	.481	+ .019	4	17.88
1779	BD+68° 319	G5	*8.75*	8.67	14 41.87	6.0830	+ .1043	+ .0005	+68 18 12.36	8.889	.798	− .022	4	16.53
1780	υ⁴ Eridani *m.*	B9	3.59		14 52.004	2.2647	+ .0031	+ .0047	−33 59 35.16	8.876	.299	− .003	5	20.93
1781	BD−12° 855	K0	8.5	8.71	4 15 1.732	+2.8195	+ .0048	− .0003	−11 55 50.97	+8.863	− .372	+ .003	4	19.00
1782	BD+23° 673	F2	9.4	9.2	15 3.559	3.5956	+ .0145	.000	+23 33 55.77	8.861	.474	− .01	4	18.34
1783	54 Persei	G5	5.10	5.00	15 12.658	3.8930	+ .0205	− .0025	+34 22 29.48	8.849	.514	− .015	4	19.03
1784	γ Tauri	K0	3.86	3.74	15 14.258	3.4038	+ .0113	+ .0081	+15 26 8.08	8.847	.449	− .027	50 35	18.46 18.58
1785	BD− 3° 744		8.9		15 18.811	2.9996	+ .0063	+ .0011	− 3 29 23.14	8.841	.396	− .025	5	18.47
1786	BD+56° 905	A2	5.90	6.30	4 15 20.618	+4.8722	+ .0492	− .001	+56 18 55.65	+8.839	− .642	− .01	4	18.29
1787	BD−15° 765 *m.*	A5	8.9	8.3	15 54.523	2.7428	+ .0043	− .001	−15 21 43.82	8.794	.363	− .03	4	19.44
1788	CD−28° 1491		9.9		15 59.162	2.4293	+ .0032	+ .0005	−28 10 42.73	8.788	.322	− .036	5	18.76
1789	Brad 586	F0	5.27	5.66	16 3.915	3.3925	+ .0111	+ .0077	+14 54 17.07	8.782	.448	− .033	4	18.99
1790	BD+49° 1166	A3	9.0		16 7.147	4.4941	+ .0362	+ .002	+49 47 42.44	8.778	.593	− .01	4	19.10
1791	BD− 4° 800	G0	9.05		4 16 13.295	+2.9742	+ .0061	+ .0009	− 4 41 4.94	+8.769	− .394	− .004	4	18.22
1792	BD+51° 911	G5	*9.42*		16 17.855	4.5902	+ .0391	+ .004	+51 37 14.58	8.764	.606	− .05	4	19.21
1793	Lal 8165 *br.*	B9	6.65	6.98	16 31.736	2.7136	+ .0041	+ .0001	−16 37 41.73	8.746	.359	.000	4	19.06
1794	Pulk (55) 640	B8	5.72	6.08	16 49.966	2.9083	+ .0053	+ .0016	− 7 46 58.26	8.722	.386	+ .002	5 4	18.28 19.17
1795	BD+ 5° 634 *m.*	G5	8.6	8.1	16 56.308	3.2000	+ .0084	+ .001	+ 6 2 39.90	8.713	.424	− .06	4	18.77
1796	BD+ 0° 734	K2	7.87	7.48	4 16 56.946	+3.0938	+ .0072	− .0003	+ 1 0 15.89	+8.713	− .410	+ .013	4	18.16
1797	BD+19° 704	G0	8.24	8.48	17 2.813	3.4938	+ .0125	− .0035	+19 16 44.56	8.705	.463	+ .006	4 5	18.84 18.45
1798	212 G Eridani	A0	5.31	5.86	17 9.566	2.6144	+ .0037	+ .0031	−20 49 46.48	8.696	.347	− .005	4	20.11
1799	BD+59° 798	K0	*8.83*	9.1	17 35.320	5.1340	+ .0578	− .004	+59 41 16.72	8.662	.679	− .02	4	19.09
1800	BD+65° 403	G0	8.77	8.9	17 47.95	5.7615	+ .0847	+ .0103	+65 50 54.68	8.646	.762	+ .032	4	19.37

1747. $8^{m}1$–$8^{m}2$, $2''3$, 41°.
1752. $8^{m}7$, $6''6$, 144°.

1769. $11^{m}5$, $6''0$, 33°.
1780. $4^{m}0$–$4^{m}9$, $<0''5$.

1787. $8^{m}9$–$12^{m}9$, $0''8$, 261°.
1793. 14^{m}, $4''3$, 162°.

1795. $8^{m}8$–$10^{m}3$, $0''4$, 112°.

No.	Name	Sp.	Mag.	Obs Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1801	BD+44° 932		*9.4*	8.7	4 17 49.827	+4.2739	+0.0293	−0.002	+44 53 32.48	+8.643	−0.566	−0.01	4	18.71
1802	BD+31° 769	F8	9.0		18 3.748	3.8267	+ .0185	+ .0057	+32 0 28.48	8.625	.508	− .079	4	17.95
1803	BD+16° 585	G5	7.8	8.04	18 8.972	3.4325	+ .0114	+ .0103	+16 36 15.17	8.618	.455	− .042	4	18.49
1804	Pi 4^h 68 *m.*	F0	5.88	6.2	18 11.998	2.4864	+ .0033	+ .0019	−25 54 56.77	8.614	.331	− .053	4	18.75
1805	δ Tauri	K0	3.93	3.83	18 19.089	3.4499	+ .0117	+ .0077	+17 21 21.56	8.605	.458	− .033	63 54	19.24 19.56
1806	CD−29° 1685	G5	9.74	ft.	4 18 22.860	+2.3829	+ .0032	+ .0005	−29 44 38.28	+8.601	− .317	+ .014	3	17.57
1807	BD+36° 883	A7	*9.45*	9.4	18 28.268	3.9615	+ .0214	.000	+36 21 27.14	8.592	.526	− .03	4	18.37
1808	BD−19° 897	A5	8.13	7.3	18 36.441	2.6376	+ .0038	+ .0010	−19 48 48.72	8.582	.351	− .010	5 4	19.03 19.09
1809	BD+41° 861	A2	6.88	7.10	18 55.196	4.1436	+ .0256	+ .0004	+41 32 43.13	8.557	.550	− .041	4	18.61
1810	BD− 1° 630	G0	8.4	8.43	19 15.312	3.0484	+ .0066	+ .0037	− 1 9 14.10	8.530	.405	− .045	4	17.62
1811	BD+12° 584	K0	7.74	7.41	4 19 35.995	+3.3474	+ .0101	+ .001	+12 47 17.54	+8.503	− .446	− .02	4	18.58
1812	ξ Eridani	A2	5.23	5.56	19 41.776	2.9896	+ .0060	− .0033	− 3 55 46.00	8.495	.398	− .052	4	18.34
1813	BD−21° 854	K0	9.2		19 42.194	2.5886	+ .0036	+ .0075	−21 48 1.02	8.495	.346	+ .010	4	19.02
1814	BD+61° 714		*9.27*		19 51.86	5.2730	+ .0617	− .004	+61 10 34.22	8.482	.700	+ .01	3	17.72
1815	BD+77° 160		9.20		20 1.49	8.7923	+ .2859	− .0011	+78 2 36.69	8.469	1.165	+ .017	4	18.32
1816	BD+20° 753	K0	*9.15*	9.5	4 20 5.294	+3.5358	+ .0129	− .003	+20 55 18.96	+8.465	− .471	− .06	4	18.51
1817	BD+29° 709	F	8.8	8.97	20 11.186	3.7613	+ .0169	+ .0009	+29 36 46.26	8.456	.500	− .044	4	18.55
1818	Lac 1438	G5	6.39		20 11.569	2.2011	+ .0033	− .0009	−35 43 49.92	8.456	.294	+ .009	5	19.22
1819	BD+ 2° 702	F0	*8.63*	8.12	20 16.296	3.1215	+ .0074	+ .0037	+ 2 18 28.81	8.450	.413	− .050	4	18.29
1820	BD+82° 117		*9.15*	9.3	20 17.51	12.2993	+ .6742	− .0056	+82 31 2.89	8.448	1.629	− .015	4	18.60
1821	Lal 8139	A0	6.23	6.31	4 20 21.716	+4.9682	+ .0500	+ .0021	+57 24 13.73	+8.443	− .661	− .008	4	18.44
1822	BD+ 4° 685		*9.38*	9.4	20 27.284	3.1708	+ .0079	− .0011	+ 4 37 30.21	8.435	.423	− .015	4	18.51
1823	BD+41° 870	A2	7.56	7.82	20 30.666	4.1658	+ .0257	.000	+42 2 14.06	8.431	.555	.00	4 5	18.64 18.28
1824	BD+35° 865	F8	*9.10*	8.9	20 38.150	3.9494	+ .0207	+ .002	+35 51 50.10	8.421	.527	− .05	4	18.99
1825	68 Tauri	A2	4.24	4.46	20 51.518	3.4610	+ .0116	+ .0075	+17 44 45.87	8.403	.462	− .025	4	19.12
1826	BD− 9° 894	A0	7.71	7.4	4 20 56.004	+2.8717	+ .0051	− .002	− 9 24 24.25	+8.397	− .384	+ .01	4	18.38
1827	υ^3 Eridani	K5	4.06		21 1.842	2.2478	+ .0032	+ .0045	−34 12 6.75	8.390	.301	+ .055	5	17.90
1828	Lal 8101	K0	7.02	7.26	21 26.74	6.2705	+ .1063	+ .0025	+69 12 3.06	8.357	.835	− .040	13	19.68
1829	BD+39° 989	K0	8.47	8.37	21 33.755	4.0965	+ .0238	+ .0048	+40 7 8.53	8.347	.547	− .009	4	19.11
1830	BD+47° 993	G5	*8.79*	8.73	21 40.376	4.4279	+ .0322	− .001	+48 7 3.36	8.339	.591	.00	4	19.05
1831	BD+33° 860	K0	*8.59*	8.50	4 21 48.196	+3.8856	+ .0191	+ .003	+33 46 17.33	+8.328	− .519	− .01	4	18.50
1832	Wi (1) 4^h 378	B5	5.99	6.34	22 0.591	3.2525	+ .0088	− .0011	+ 8 24 34.51	8.312	.435	− .010	4 5	18.77 18.03
1833	BD−11° 873	K2	9.4	9.1	22 13.380	2.8285	+ .0048	+ .0012	−11 21 3.65	8.295	.379	+ .008	4	18.37
1834	BD+75° 182	K0	8.32	7.96	22 22.89	7.9015	+ .2078	− .0022	+75 51 17.15	8.282	1.052	+ .014	4	18.68
1835	BD+54° 773	F8	7.71	7.35	22 29.256	4.7997	+ .0431	− .0064	+54 49 22.33	8.274	.641	− .033	4	18.35
1836	Wi (1) 4^h 400	K0	6.37	6.4	4 22 50.972	+3.1131	+ .0072	+ .0050	+ 1 54 3.46	+8.245	− .417	− .035	4	18.53
1837	CD−23° 1924	F5	10.6	ft.	22 55.413	2.5504	+ .0035	− .0054	−23 12 28.00	8.239	.343	− .011	4	19.49
1838	BD+25° 715	K7	*9.43*		23 6.557	3.6551	+ .0146	− .002	+25 32 26.21	8.224	.489	.00	4	18.80
1839	BD− 5° 920		9.4		23 8.428	2.9642	+ .0058	+ .0043	− 5 5 19.44	8.222	.397	− .050	4	19.27
1840	BD+ 6° 687	A0	9.2		23 18.933	3.2102	+ .0081	− .002	+ 6 26 1.16	8.208	.430	+ .03	4	18.30
1841	CD−27° 1709	G0	9.1		4 23 22.770	+2.4395	+ .0033	− .0001	−27 26 38.76	+8.203	− .328	− .024	4	18.55
1842	BD+64° 452		*8.65*	9.1	23 33.76	5.6391	+ .0742	+ .0167	+64 34 44.41	8.188	.754	− .086	4	18.86
1843	BD+53° 773	A0	*9.25*		23 40.056	4.7334	+ .0405	+ .002	+53 41 47.77	8.180	.634	.00	4	19.16
1844	CD−29° 1722	G0	9.2		23 41.310	2.3820	+ .0032	+ .0035	−29 30 48.94	8.178	.320	+ .001	5	18.49
1845	CD−25° 1888	G5	9.9		23 45.889	2.4988	+ .0034	+ .0053	−25 11 18.87	8.172	.336	− .002	4	19.45
1846	BD−17° 881	K0	8.7		4 23 46.703	+2.6943	+ .0040	+ .0010	−17 13 37.23	+8.171	− .362	+ .011	4	19.54
1847	BD+43° 982		*9.68*	9.20	23 48.651	4.2314	+ .0264	− .002	+43 30 48.84	8.168	.567	− .01	4	18.75
1848	ε Tauri	K0	3.63	3.75	23 56.530	3.4931	+ .0118	+ .0080	+19 0 14.94	8.158	.469	− .038	72 60	19.90 19.92
1849	BD+21° 652	K5	9.0	8.50	24 15.286	3.5508	+ .0129	− .006	+21 44 32.00	8.133	.477	+ .18	4	17.65
1850	Wi (2) 4^h 436	A0	6.61	6.8	24 23.174	3.7014	+ .0152	+ .0001	+27 13 43.55	8.122	.496	− .027	4	17.81
1851	BD−15° 794	G5	7.10	7.1	4 24 28.098	+2.7371	+ .0043	+ .0003	−15 21 29.47	+8.116	− .368	+ .040	4	18.14
1852	Lal 8474 *n. f.*	F5	7.23	7.04	24 28.464	2.5869	+ .0036	− .0018	−21 40 49.54	8.115	.348	− .062	4	18.66
1853	BD− 7° 818	K0	8.7	8.8	24 29.662	2.9205	+ .0054	− .002	− 7 5 59.27	8.114	.393	.00	4	18.30
1854	BD+39° 1004	K5	8.6	8.98	24 33.182	4.0859	+ .0230	− .002	+39 39 40.47	8.109	.548	+ .02	5	18.87
1855	BD+ 7° 651		*9.33*		24 45.170	3.2366	+ .0084	− .001	+ 7 38 58.34	8.093	.436	+ .02	4	18.61
1856	BD+13° 688	G5	7.76	7.78	4 25 1.660	+3.3714	+ .0102	+ .011	+13 43 10.97	+8.071	− .453	+ .01	4	18.48
1857	BD+55° 980	F8	*8.55*	7.98	25 10.763	4.8673	+ .0441	+ .004	+55 42 46.17	8.059	.653	− .03	5	17.46
1858	BD+10° 583	B9	6.61	6.9	25 18.854	3.2962	+ .0060	− .001	+10 20 48.42	8.048	.443	.00	4	17.44
1859	Pulk (55) 675	B3	5.50	5.35	25 23.978	2.7851	+ .0045	+ .0005	−13 13 25.73	8.041	.375	− .001	4	19.10
1860	80 Tauri *m*	F0	5.70	5.76	25 34.732	3.4115	+ .0105	+ .0073	+15 27 50.73	8.027	.459	− .012	4	18.76

1804. 6^{m}5–6^{m}8, 0$''$3, 40°; 64 yrs.

1852. 7^{m}7, 1$''$4, 250°

1860. 5^{m}9–8^{m}3, 0$''$9, 30°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1861	1^{2} Camelop. .... *s f.*	B1	5.86	5.68	4 25 41.164	+4.7424	+0.0399	+0.0007	+53 44 18.39	+8.018	−0.637	−0.005	4	19.03
1862	BD+ 3° 611 . ..		*9.24*	9.4	25 49.500	3.1439	+ .0074	+ .0011	+ 3 19 32.31	8.007	.423	− .037	4	18.83
1863	BD+70° 305.	A0	7.99	8.35	25 57.21	6.4720	+ .1113	+ .0031	+70 10 34.32	7.996	.869	− .020	4	18.16
1864	Brad 620	A5	5.49	5.58	26 4.911	3.4131	+ .0105	+ .0073	+15 31 8.59	7.986	.460	− .012	4	18.84
1865	BD− 8° 869..........		9.4		26 15.131	2.8954	+ .0051	− .001	− 8 13 35.70	7.973	.391	+ .02	4	18.37
1866	BD− 0° 709........ .		9.4	9.4	4 26 22.515	+3.0560	+ .0064	− .0011	− 0 46 47.99	+7.963	− .413	+ .014	4	18.64
1867	BD+22° 707........	A0	*7.72*	7.48	26 48.357	3.5855	+ .0130	.000	+22 40 25.77	7.928	.484	− .04	4	18.46
1868	BD+71° 262........	A2	*8.88*	8.5	26 52.99	6.6734	+ .1207	− .0019	+71 10 29.05	7.922	.896	− .033	4	18.12
1869	Lal 8455.	F5	6.82	7.20	26 56.870	3.9936	+ .0203	+ .0019	+36 52 19.98	7.917	.539	− .002	4	18.35
1870	BD+31° 787............	M0	*8.93*	8.7	27 5.774	3.8210	+ .0169	− .0001	+31 21 23.28	7.905	.515	− .010	5	16.99 17.42
1871	BD+50° 1013...*n. pr.*	F8	7.78	8.17	4 27 7.886	+4.5828	+ .0347	− .0023	+50 52 43.60	+7.902	− .617	− .046	4	17.98
1872	CD−23° 1983.........	A2	7.04	6.78	27 9.963	2.5464	+ .0035	+ .0004	−23 11 48.77	7.899	.345	− .005	4	18.45
1873	BD+28° 660..........	B8	9.1	9.18	27 10.493	3.7492	+ .0156	+ .0005	+28 50 40.55	7.899	.505	+ .016	4	18.84
1874	BD+16° 614............	A0	*9.25*		27 12.010	3.4491	+ .0109	− .001	+17 2 13.58	7.897	.465	− .02	4	18.86
1875	BD+46° 895............	G5	8.9	9.1	27 22.358	4.3689	+ .0289	+ .018	+46 31 54.33	7.883	.589	− .11	4	18.53
1876	BD+ 5° 671............	B9	6.66	6.88	4 27 34.656	+3.1931	+ .0077	.000	+ 5 35 38.15	+7.866	− .432	− .03	5	17.08
1877	BD−19° 946............	F5	8.7		27 41.842	2.6338	+ .0037	− .0035	−19 38 46.04	7.857	.357	+ .050	4	17.70
1878	*m* Persei	F0	6.07	6.12	27 46.835	4.2151	+ .0250	+ .0006	+42 53 40.04	7.850	.569	+ .001	4	17.91
1879	BD+12° 606............	G0	8.8	8.79	28 28.152	3.3437	+ .0094	− .001	+12 24 54.69	7.795	.452	+ .01	4	18.43
1880	BD+57° 818........	G0	*9.10*	8.6	28 31.718	5.0452	+ .0482	+ .004	+58 1 33.25	7.790	.681	− .02	4	18.30
1881	BD+23° 705..........	F0	8.0	8.08	4 28 38.360	+3.6239	+ .0133	+ .0016	+24 6 40.08	+7.781	− .490	− .009	4	18.01
1882	BD+29° 720.	K5	*9.52*		28 39.581	3.7851	+ .0160	+ .0013	+30 2 43.72	7.779	.512	− .021	4	17.91
1883	BD+49° 1204....... .	A0	7.07	7.13	28 41.700	4.5384	+ .0328	+ .0009	+49 57 26.58	7.776	.613	− .010	4	18.85
1884	BD+19° 736........*m.*	K0	9.2	8.7	28 41.884	3.5124	+ .0116	− .002	+19 38 43.81	7.776	.475	− .01	4	18.24
1885	BD+34° 891............	A0	8.30	8.52	28 50.436	3.9237	+ .0186	+ .001	+34 37 58.08	7.765	.530	+ .01	5	18.76
1886	BD+47° 1008............	G	8.8	9.10	4 28 57.970	+4.4343	+ .0299	− .003	+47 51 14.98	+7.754	− .599	+ .04	4	18.18
1887	BD−14° 923............	G	9.4		29 7.104	2.7657	+ .0043	+ .0035	−13 59 10.43	7.742	.375	+ .063	4	18.41
1888	*ρ* Tauri..................	A5	4.75	5.23	29 18.321	3.3957	+ .0100	+ .0069	+14 40 38.84	7.727	.460	− .026	4 3	19.53 20.41
1889	BD−12° 923............	K0	6.69	6.85	29 22.788	2.7945	+ .0045	− .0006	−12 42 39.01	7.721	.380	− .030	4	18.16
1890	BD+63° 516............		*9.63*		29 24.46	5.5174	+ .0646	− .004	+63 13 47.48	7.719	.745	.00	4 5	18.60 17.89
1891	BD+67° 340	G0	*8.77*		4 29 27.79	+6.1253	+ .0901	− .0020	+67 59 53.60	+7.714	− .827	+ .060	4	18.33
1892	BD−11° 899............	F8	8.9	8.39	29 31.133	2.8329	+ .0047	+ .0029	−10 59 58.07	7.710	.385	− .152	4	18.51
1893	BD− 2° 939	K0	9.2	8.6	29 41.724	3.0162	+ .0060	− .0013	− 2 37 12.66	7.696	.410	− .011	4	18.11
1894	BD+ 3° 619..........	K0	*7.80*	7.78	30 2.694	3.1500	+ .0072	− .0001	+ 3 34 59.36	7.667	.428	+ .008	5	16.79
1895	CD−25° 1948......		9.7		30 7.173	2.4812	+ .0033	+ .0042	−25 35 45.36	7.661	.338	− .012	4	19.15
1896	BD+38° 917	A2	8.6	8.90	4 30 7.709	+4.0482	+ .0207	+ .0022	+38 18 18.19	+7.661	− .548	− .069	6	20.29
1897	BD+80° 146..........	G5	7.87	7.87	30 45.57	10.6199	+ .4124	+ .0004	+80 41 49.14	7.610	1.435	− .029	4	18.06
1898	BD+60° 826..	K0	6.77	6.79	31 10.92	5.2795	+ .0545	.000	+60 43 22.07	7.576	.716	− .02	4	18.05
1899	*α* Tauri	K5	1.06	1.07	31 19.667	3.4358	+ .0103	+ .0048	+16 20 58.66	7.563	.467	− .191	90 69	19.27 19.26
1900	BD− 5° 963............	G0	8.05	7.80	31 24.033	2.9666	+ .0055	+ .0009	− 4 53 57.06	7.558	.404	− .059	5	17.63
1901	BD+65° 421............		*9.30*		4 31 28.83	+5.8221	+ .0749	− .0050	+65 45 39.17	+7.551	− .791	.000	4	18.37
1902	BD+43° 1021.........		8.6	9.33	31 36.474	4.2676	+ .0252	− .003	+43 58 46.87	7.541	.580	− .01	4	17.94
1903	BD− 6° 943..........		9.2		31 38.526	2.9370	+ .0053	− .002	− 6 15 20.46	7.538	.400	− .01	4	18.41
1904	BD+58° 761........ .	B8	*8.45*	8.86	31 47.842	5.0940	+ .0480	− .004	+58 30 5.19	7.525	.692	− .02	5	17.98
1905	BD+66° 336..........	A0	*8.77*	8.9	31 48.88	5.9500	+ .0799	+ .0030	+66 42 30.57	7.524	.807	− .026	4	18.86
1906	*ν* Eridani....	B2	4.12	3.94	4 32 19.228	+2.9966	+ .0058	.0000	− 3 30 53.94	+7.483	− .408	− .002	4	17.85
1907	*υ*^{7} Eridani... ...	K0	3.88	3.8	32 26.412	2.3357	+ .0032	− .0046	−30 43 31.33	7.473	.319	− .004	4	19.06
1908	BD+25° 720...	K2	7.61	7.85	32 30.701	3.6660	+ .0134	+ .0021	+25 33 59.21	7.468	.499	− .012	4	17.44
1909	BD+14° 728.. ..	G0	7.79	7.68	32 58.658	3.4050	+ .0098	+ .004	+14 59 9.87	7.430	.464	− .02	4	18.27
1910	Brad 640	B5	5.32	5.46	33 6.190	3.0909	+ .0064	− .0008	+ 0 50 14.07	7.420	.422	− .014	4 5	19.34 18.50
1911	CD−27° 1799. ... *br.*	F5	7.16	7.0	4 33 20.772	+2.4342	+ .0033	+ .0020	−27 12 32.50	+7.400	−.332	− .020	4	18.00
1912	BD+ 4° 723 .	F0	*7.70*	7.80	33 23.074	3.1775	+ .0073	− .0005	+ 4 49 20.67	7.396	.433	− .013	4	18.25
1913	BD+29° 725..	A2	*8.77*	8.47	33 24.075	3.7677	+ .0151	− .0007	+29 13 39.34	7.396	.514	− .007	4	17.94
1914	BD+38° 922..	K2	*9.06*	8.6	33 25.054	4.0783	+ .0206	+ .002	+38 59 32.96	7.394	.556	+ .05	4	18.58
1915	Pulk (55) 697..	B9	5.73	6.28	33 32.484	3.5378	+ .0115	− .0003	+20 31 30.62	7.384	.483	+ .002	4	17.42
1916	Brad 642.......	A5	5.31	5.77	4 33 34.448	+3.0156	+ .0059	+ .0030	− 2 37 56.71	+7.381	− .412	− .050	4	18.43
1917	BD+52° 866.	K2	*7.97*	8.01	33 39.865	4.7016	+ .0353	.000	+52 39 41.47	7.374	.641	+ .01	4	18.32
1918	Cape (80) 1987	B8	6.29	5.94	33 44.561	2.3296	+ .0032	− .0009	−30 52 40.59	7.368	.318	− .001	5	17.39
1919	BD+45° 971...		*9.52*		33 45.924	4.3358	+ .0262	+ .004	+45 27 42.93	7.366	.591	− .04	5	17.48
1920	BD−16° 905	A0	8.5	8.46	33 49.690	2.7040	+ .0040	+ .0025	−16 31 20.87	7.361	.369	− .012	4	18.63

1861. 6^{m}61, 10″, 307°. 1871. 8^{m}3, 3″2, 134°. 1884. 9^{m}2-13^{m}, 0″8, 152°. 1911. 11^{m}6, 1″4, 67°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1921	BD+22° 721	F5	*7.79*	7.36	4 34 2.242	+3.6003	+0.0123	+0.009	+22 59 32.48	+7.344	−0.492	−0.05	4	17.70
1922	CD−28° 1642	F8	9.1		34 23.777	2.4016	+ .0033	+ .0042	−28 20 33.29	7.314	.329	+ .014	4	19.06
1923	BD− 8° 901	K0	8.7	8.6	34 28.879	2.8881	+ .0049	− .001	− 8 26 11.76	7.307	.395	+ .01	4	18.09
1924	Lal 8781	K0	7.73	7.62	34 30.592	2.6690	+ .0038	− .0009	−17 58 30.41	7.305	.365	− .044	4	19.07
1925	53 Eridani	K0	3.98	4.20	34 30.921	2.7519	+ .0042	− .0054	−14 27 34.24	7.305	.377	− .161	4 5	18.88 18.11
1926	Rad (45) 1260	F5	6.51	6.21	4 34 53.02	+8.2446	+ .2008	+ .0161	+76 27 45.20	+7.275	−1.123	− .142	9	18.31
1927	BD+32° 820	F8	*8.38*	8.60	34 55.948	3.8808	+ .0167	− .001	+32 58 42.24	7.271	.531	− .05	4	18.56
1928	BD+63° 530	G0	*8.75*	9.2	35 2.98	5.6014	+ .0633	+ .004	+63 46 18.01	7.261	.764	− .09	4	18.92
1929	BD−21° 936		9.2		35 4.901	2.5943	+ .0036	− .001	−21 0 35.83	7.258	.356	− .05	4	19.33
1930	BD− 0° 743	K0	7.63	7.49	35 22.720	3.0675	+ .0062	− .0004	− 0 14 25.54	7.234	.420	− .049	4	18.34
1931	BD+36° 924	A3	8.25	8.02	4 35 23.691	+4.0015	+ .0187	+ .002	+36 41 41.79	+7.233	− .547	− .01	6 7	20.84 19.99
1932	BD+49° 1224		*9.15*		35 28.252	4.5618	+ .0310	− .002	+50 4 3.20	7.227	.623	.00	4	18.51
1933	BD+24° 675	F2	*9.54*		35 28.541	3.6512	+ .0129	− .002	+24 53 48.64	7.226	.500	+ .01	4	19.15
1934	BD+13° 705	G0	*9.30*	9.1	35 30.018	3.3681	+ .0091	+ .003	+13 19 49.55	7.224	.462	− .09	4	18.76
1935	Brad 646	B9	5.37	5.67	35 35.990	3.3387	+ .0088	+ .0005	+12 2 29.69	7.216	.457	− .026	4	18.84
1936	BD+41° 931	G0	7.29	7.60	4 35 56.100	+4.1949	+ .0224	+ .0492	+41 58 23.76	+7.189	− .574	− .418	5	18.94
1937	BD−14° 937	F8	7.81	7.71	35 57.186	2.7442	+ .0041	+ .0008	−14 45 11.86	7.187	.377	+ .054	4	18.37
1938	BD−10° 977	G0	8.6	8.33	36 0.508	2.8336	+ .0046	− .0017	−10 51 6.12	7.183	.388	+ .014	4	18.83
1939	BD+ 6° 734		9.1	8.85	36 48.673	3.2145	+ .0074	− .003	+ 6 28 37.73	7.117	.441	+ .03	4	18.11
1940	54 Eridani *m.*	Ma	4.54	5.08	36 56.468	2.6223	+ .0037	+ .0017	−19 49 26.73	7.107	.360	− .090	4	18.19
1941	BD+ 9° 627		*9.61*		4 37 0.319	+3.2947	+ .0082	.000	+10 4 25.39	+7.101	− .452	+ .02	4	17.54
1942	Brad 644	A0	5.25	5.6	37 13.502	4.2472	+ .0231	+ .0041	+43 12 50.81	7.083	.582	− .050	4	18.74
1943	Grmb 866	B8	5.77	5.93	37 16.400	4.5533	+ .0301	+ .0004	+49 49 20.35	7.080	.625	− .027	4	17.94
1944	τ Tauri	B5	4.33	4.25	37 26.425	3.5985	+ .0118	+ .0004	+22 48 16.87	7.066	.494	− .022	73 63	18.92 19.04
1945	BD−22° 882	G5	9.2		37 38.356	2.5536	+ .0035	+ .0028	−22 32 18.11	7.049	.352	+ .048	4	18.20
1946	BD+ 9° 628	F2	6.85	7.02	4 37 51.987	+3.2817	+ .0080	+ .004	+ 9 28 58.91	+7.031	− .450	− .06	4	17.80
1947	BD+54° 803	K2	*8.72*	8.68	37 52.866	4.8199	+ .0367	− .001	+54 23 13.39	7.030	.662	− .02	4	17.64
1948	35 B Camelop	F0	6.04	5.80	38 2.51	8.0192	+ .1783	+ .0114	+75 47 53.64	7.017	1.098	− .131	8	18.26
1949	BD+25° 725	K5	8.6	8.35	38 9.809	3.6859	+ .0129	− .0018	+26 5 32.43	7.007	.506	+ .017	4	17.76
1950	BD+46° 903	G5	8.6	8.70	38 17.070	4.4071	+ .0263	+ .006	+46 49 4.91	6.997	.605	− .14	5	17.47
1951	BD+ 1° 800	K0	9.19	8.68	4 38 27.460	+3.1011	+ .0064	− .0005	+ 1 18 2.09	+6.982	− .427	+ .003	4	18.35
1952	BD−12° 970	K0	9.1	9.1	38 31.495	2.7993	+ .0043	+ .006	−12 18 41.01	6.977	.385	− .05	4	17.91
1953	Wi (2) 4ʰ 750	A3	6.45	6.80	38 37.752	3.8776	+ .0159	− .0031	+32 42 58.28	6.968	.534	− .038	4	18.09
1954	BD+18° 688	A0	9.1	9.23	38 43.362	3.4911	+ .0103	.000	+18 27 42.95	6.961	.480	− .02	4	17.89
1955	BD− 6° 970	A0	7.9	7.82	39 13.191	2.9271	+ .0050	+ .003	− 6 37 14.77	6.920	.403	.00	5	17.90
1956	BD+68° 346		*9.10*		4 39 33.73	+6.2569	+ .0847	− .0005	+68 29 27.36	+6.892	− .859	− .020	4	18.10
1957	BD+ 3° 652	K0	*8.17*	7.93	39 37.208	3.1457	+ .0067	− .0011	+ 3 19 43.38	6.887	.434	− .009	5	18.16
1958	BD− 4° 928	A3	8.6	8.5	39 51.872	2.9750	+ .0054	− .0026	− 4 26 53.85	6.867	.411	− .014	4	18.01
1959	BD+56° 971	K5	*8.87*	9.5	40 1.873	4.9670	+ .0396	− .006	+56 27 26.01	6.853	.684	− .01	4	18.08
1960	BD+43° 1048		9.0		40 8.228	4.2792	+ .0231	+ .005	+43 50 51.80	6.845	.589	− .01	5	18.78
1961	BD+37° 964	F0	9.02	9.10	4 40 11.126	+4.0398	+ .0185	+ .002	+37 35 29.97	+6.841	− .556	− .03	4	18.63
1962	Brad 656	B5	5.87		40 14.600	2.8815	+ .0047	− .0003	− 8 39 7.59	6.836	.398	− .012	4	18.66
1963	CD−25° 2027	A3	8.15	8.3	40 30.609	2.4886	+ .0033	− .0010	−24 55 40.66	6.814	.344	+ .005	4	18.93
1964	BD−16° 933		9.3		40 30.624	2.7073	+ .0039	+ .0003	−16 12 38.58	6.814	.374	− .011	4	18.53
1965	BD+ 0° 834	B3	7.28	7.38	40 35.616	3.0819	+ .0061	− .0034	+ 0 25 16.69	6.807	.425	− .035	4	18.74
1966	BD−10° 999	G0	8.7	8.7	4 40 36.690	+2.8491	+ .0046	+ .0015	−10 5 18.91	+6.806	− .394	− .187	4	18.91
1967	BD+72° 238		*8.28*	8.40	40 38.53	7.1273	+ .1230	− .0016	+72 46 31.16	6.803	.981	− .023	4	18.38
1968	Lac 1569	K2	7.04	6.59	41 2.126	2.4117	+ .0033	+ .0020	−27 43 29.46	6.771	.334	− .018	4	18.82
1969	4 Camelop	A2	5.35	5.28	41 19.920	4.9824	+ .0394	+ .0064	+56 37 0.58	6.746	.687	− .148	4 5	18.56 17.86
1970	μ Eridani	B5	4.18	4.19	41 30.045	2.9979	+ .0054	+ .0013	− 3 24 0.95	6.732	.414	− .010	70 57	19.11 19.13
1971	BD+35° 905	K5	*9.46*		4 41 30.754	+3.9833	+ .0171	+ .005	+35 52 59.75	+6.731	− .550	+ .01	4	18.72
1972	BD+23° 741	K0	*8.57*	7.90	41 32.548	3.6208	+ .0117	.000	+23 31 48.76	6.729	.500	.00	4	18.35
1973	Brad 651	F0	6.34	6.4	41 32.951	4.9017	+ .0371	+ .0084	+55 27 40.71	6.728	.676	− .098	4	19.00
1974	BD+27° 694	A2	*8.45*	8.78	41 33.710	3.7352	+ .0132	− .0006	+27 45 21.21	6.727	.516	− .004	4	18.70
1975	Pi 4ʰ 186	K2	6.08	5.74	41 37.674	2.5786	+ .0036	+ .0011	−21 25 45.23	6.722	.356	− .019	4	19.17
1976	BD+65° 431	K0	*7.92*	7.71	4 41 38.14	+5.8346	+ .0661	+ .0018	+65 29 41.03	+6.721	− .804	− .043	4	19.04
1977	BD+ 4° 749	B9	8.0	8.2	41 42.902	3.1655	+ .0067	− .0004	+ 4 12 52.74	6.715	.438	− .001	4	19.01
1978	BD+17° 781	K7	*9.43*	8.8	41 45.612	3.4631	+ .0097	− .002	+17 13 32.41	6.711	.479	+ .05	4	18.27
1979	BD−22° 965		9.8		41 50.749	2.5474	+ .0034	+ .0030	−22 38 32.97	6.704	.353	+ .010	4	19.53
1980	BD+20° 822	A2	9.4	ft.	42 28.443	3.5416	+ .0106	− .001	+20 24 14.45	6.652	.490	.00	5 4	18.56 18.44

1940. 5^{m}1-5^{m}4, 0$''$1, 161°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
1981	CD−28° 1729	K0	8.1	7.96	4 42 29.954	+ 2.3796	+0.0032	−0.0002	−28 48 11.34	+6.650	−0.330	−0.029	4	18.84
1982	BD+11° 649	K7	9.1	8.3	42 30.135	3.3208	+ .0081	− .001	+11 7 57.80	6.649	.459	− .02	4	18.63
1983	BD+59° 832	K5	*8.75*	8.96	42 42.925	5.2073	+ .0450	− .002	+59 25 33.93	6.632	.719	− .03	4	17.86
1984	Lac 1587	B9	6.84		42 51.948	2.2171	+ .0033	+ .0022	−34 8 59.79	6.620	.308	+ .012	4	19.72
1985	BD+48° 1151	A0	*9.09*	9.23	43 0.977	4.5166	+ .0271	+ .002	+48 51 14.20	6.607	.625	− .03	4	18.12
1986	BD+14° 757	K0	8.89	8.76	4 43 9.893	+ 3.4120	+ .0091	.000	+15 2 53.24	+6.595	− .472	+ .03	5	17.90
1987	BD+12° 649	G0	8.5	8.27	43 10.556	3.3634	+ .0085	− .001	+12 58 20.40	6.594	.466	.00	4	17.96
1988	268 G Eridani	A2	5.97	6.3	43 14.088	2.3951	+ .0033	− .0005	−28 13 53.56	6.589	.333	+ .015	4	18.11
1989	BD−18° 921	F5	7.7	8.00	43 18.218	2.6493	+ .0037	− .0009	−18 32 31.45	6.584	.368	− .023	4	18.58
1990	Wi (2) 4h 866	B9	7.36	7.33	43 18.980	3.7907	+ .0137	− .0018	+29 37 55.19	6.583	.524	− .031	4	18.34
1991	BD+ 6° 754		9.3		4 43 29.800	+ 3.2291	+ .0071	− .001	+ 7 3 41.07	+6.568	− .448	+ .01	4	18.86
1992	BD− 0° 771	F2	8.2	7.93	43 35.760	3.0676	+ .0059	− .0010	− 0 13 49.08	6.559	.425	− .036	4	18.50
1993	BD+74° 218		*9.80*		43 35.81	7.5630	+ .1403	+ .0092	+74 17 34.10	6.559	1.044	− .046	4	18.13
1994	BD+24° 689	F2	8.0	8.00	43 42.981	3.6510	+ .0117	+ .0023	+24 36 9.75	6.549	.506	− .025	4	18.44
1995	BD+34° 911	Nb	*8.43*	8.80	43 59.178	3.9529	+ .0161	+ .0026	+34 51 42.62	6.527	.547	− .029	4	18.44
1996	BD+42° 1063		*8.7*	9.17	4 44 9.956	+ 4.2279	+ .0209	+ .001	+42 25 36.04	+6.512	− .586	+ .04	6	18.51
1997	BD− 2° 1021	F0	8.8	9.3	44 21.035	3.0284	+ .0056	+ .0005	− 2 0 25.08	6.497	.420	− .008	4	18.42
1998	BD+50° 1070	Ma	8.07	7.90	44 30.822	4.5942	+ .0283	.000	+50 16 14.78	6.484	.637	+ .01	4	17.81
1999	BD−12° 997	A5	8.1	8.39	44 48.678	2.8063	+ .0043	− .0021	−11 53 31.77	6.459	.390	.000	4	18.68
2000	CD−24° 2590	K5	8.9		45 18.938	2.4992	+ .0034	.0000	−24 22 18.22	6.417	.347	− .044	4	18.43
2001	Grmb 856	K0	5.32	5.26	4 45 19.09	+11.1250	+ .3818	− .0008	+81 3 53.16	+6.416	−1.539	+ .031	8	17.88
2002	π^3 Orionis	F8	3.31	3.73	45 29.826	3.2242	+ .0070	+ .0316	+ 6 49 21.75	6.402	.448	+ .019	18 19	23.23 23.26
2003	BD+ 9° 662	F5	*8.70*	8.91	45 33.577	3.2813	+ .0075	− .003	+ 9 21 6.98	6.397	.456	− .01	4	17.83
2004	BD+45° 992	G0	7.12	6.5	45 50.165	4.3715	+ .0231	+ .0358	+45 42 38.17	6.374	.607	− .562	4	18.43
2005	Lal 9107	F2	6.30	6.08	46 2.062	2.7590	+ .0040	− .0095	−13 54 13.65	6.358	.384	− .180	4	18.60
2006	9 Camelop	B0	4.38	4.45	4 46 5.10	+ 5.9476	+ .0662	+ .0012	+66 12 31.48	+6.353	− .825	+ .005	12	19.05
2007	Lal 8964	A2	6.63	6.61	46 26.45	5.3937	+ .0481	+ .0020	+61 20 55.92	6.324	.749	− .028	4	18.31
2008	BD+37° 976	K0	*9.46*		46 28.037	4.0645	+ .0174	.000	+38 1 37.78	6.322	.564	.00	4	18.25
2009	60 Eridani	K0	5.16	5.36	46 35.193	2.7005	+ .0038	+ .0031	−16 21 19.10	6.312	.376	+ .062	4	18.57
2010	BD− 4° 955	A0	8.6	8.72	46 39.309	2.9783	+ .0051	− .0007	− 4 15 27.95	6.306	.414	− .003	4	18.77
2011	i Tauri	F0	5.12	5.2	4 46 41.496	+ 3.5022	+ .0096	+ .0059	+18 42 17.41	+6.303	− .487	− .036	4	17.74
2012	BD+25° 742	A5	*9.13*	8.2	46 41.727	3.6872	+ .0117	+ .0010	+25 50 44.31	6.303	.513	+ .020	4	18.14
2013	π^4 Orionis	B3	3.78	4.2	46 56.570	3.1942	+ .0067	− .0003	+ 5 28 9.66	6.282	.444	− .006	4	18.36
2014	BD+60° 843	A0	*8.77*	8.89	47 7.21	5.3122	+ .0452	− .004	+60 27 19.46	6.267	.738	+ .01	4	17.86
2015	CD−26° 1864	K	9.2		47 12.643	2.4490	+ .0032	+ .0022	−26 9 50.40	6.260	.342	+ .018	4	19.27
2016	BD+31° 821	A3	7.42	7.43	4 47 18.512	+ 3.8616	+ .0142	− .0016	+31 51 8.65	+6.252	− .538	− .015	4	17.45
2017	BD+40° 1074	K0	*8.95*	8.80	47 50.378	4.1746	+ .0190	+ .004	+40 55 56.51	6.208	.582	− .03	5	18.04
2018	BD+34° 917	G0	*8.11*	8.38	47 50.398	3.9484	+ .0153	+ .005	+34 34 22.96	6.208	.550	− .07	6	[illegible]
2019	BD+47° 1064	K0	*8.40*	8.20	47 51.130	4.4753	+ .0245	+ .004	+47 49 29.29	6.207	.623	− .04	5 4	17.83 18.34
2020	BD+27° 702	K5	*8.81*	8.50	47 54.481	3.7253	+ .0122	+ .0017	+27 10 54.09	6.202	.520	− .037	4	17.72
2021	o^1 Orionis	Ma	5.19	4.84	4 48 0.280	+ 3.3924	+ .0083	.0000	+14 7 6.39	+6.194	− .473	− .059	4	[illegible]
2022	BD− 5° 1063		9.2		48 2.756	2.9517	+ .0050	+ .0002	− 5 26 13.48	6.191	.412	− .056	4	17.95
2023	BD+ 1° 835	K2	*7.40*	7.80	48 3.913	3.1033	+ .0059	− .0019	+ 1 22 35.58	6.189	.433	− .038	4	18.24
2024	BD+55° 941	A0	5.58	5.8	48 30.333	4.8978	+ .0337	.0000	+55 7 43.13	6.152	.682	− .007	4	18.28
2025	BD+64° 487	K0	*8.80*	8.6	48 46.75	5.7135	+ .0560	+ .0153	+64 16 30.16	6.129	.795	− .009	4	18.38
2026	BD+71° 280	K2	*8.26*	8.00	4 49 1.77	+ 6.8235	+ .0963	− .0019	+71 15 21.75	+6.109	− .950	− .003	4	17.91
2027	BD+56° 986	K7	*8.72*	8.4	49 19.183	4.9737	+ .0351	− .001	+56 11 7.84	6.085	.694	.00	4	18.53
2028	BD+16° 664	F8	7.12	7.24	49 25.547	3.4595	+ .0089	+ .006	+16 53 46.07	6.076	.483	.00	4	17.57
2029	CD−28° 1815		10.1	ft.	49 53.236	2.3717	+ .0032	+ .0048	−28 48 58.66	6.037	.332	− .052	3	17.09
2030	BD−18° 949	F0	8.5	8.5	49 59.313	2.6596	+ .0037	+ .0002	−17 57 28.07	6.029	.372	+ .008	4	17.91
2031	π^5 Orionis	B3	3.87	3.80	4 50 4.964	+ 3.1241	+ .0060	− .0002	+ 2 18 38.58	+6.021	− .437	− .003	74 43	17.94 17.46
2032	BD− 8° 971	A3	9.8		50 7.058	2.8829	+ .0045	− .001	− 8 28 11.41	6.018	.404	+ .04	4	18.95
2033	BD+11° 675	A3	5.15	5.69	50 20.537	3.3274	+ .0076	− .003	+11 17 46.67	5.999	.465	.00	4	18.64
2034	Pi 4h 236	K0	5.54	5.19	50 28.141	3.2440	+ .0068	− .0011	+ 7 39 1.90	5.989	.454	− .028	4	18.30
2035	BD+62° 718	F8	*8.02*	8.2	50 43.10	5.5666	+ .0500	+ .025	+62 54 28.44	5.968	.777	− .16	4	18.77
2036	BD+21° 727	A2	*9.14*	7.9	4 50 51.920	+ 3.5898	+ .0101	.000	+22 3 35.21	+5.955	− .502	− .01	4	18.30
2037	BD+45° 1005		*9.17*	9.5	50 58.745	4.3936	+ .0221	+ .002	+45 59 7.03	5.946	.614	− .01	4	19.06
2038	BD+39° 1109	B8	8.22	8.02	50 59.231	4.1452	+ .0177	+ .002	+40 2 32.36	5.945	.579	+ .01	4	19.34
2039	BD− 0° 800		8.6		51 10.233	3.0734	+ .0055	− .0004	+ 0 1 50.60	5.930	.431	+ .005	4	18.72
2040	BD−20° 961	F2	8.6	8.49	51 20.684	2.5949	+ .0034	+ .0002	−20 31 3.89	5.915	.365	− .008	4	18.26

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2041	BD+51° 1001	G0	8.92	9.3	4 51 37.768	+4.7070	+0.0280	+0.011	+51 59 24.20	+5.892	−0.659	−0.13	4	19.37
2042	BD+69° 289	A	9.27		51 41.08	6.4537	+ .0783	+ .0006	+69 18 7.64	5.887	.902	− .010	4	18.76
2043	Paris 5658	K0	5.82	6.13	51 42.992	2.6932	+ .0037	− .0002	−16 32 46.55	5.884	.378	+ .062	4	18.38
2044	ι Aurigæ	K2	2.90	3.10	51 46.811	3.9037	+ .0139	+ .0007	+33 2 26.87	5.879	.546	− .027	10 7	19.34 18.58
2045	BD−11° 1003	A5	8.9	8.6	51 48.658	2.8126	+ .0041	+ .0021	−11 30 28.85	5.876	.394	− .013	4	18.63
2046	Brad 689	[illegible]	5.46	5.82	4 52 27.716	+2.9542	+ .0048	− .0006	− 5 17 49.46	+5.822	− .414	+ .004	4	18.69
2047	BD+ 5° 773	A3	8.8	8.7	52 35.677	3.2050	+ .0064	− .001	+ 5 54 18.46	5.811	.450	− .02	4	18.75
2048	BD+ 9° 691	G	9.1	9.1	52 41.315	3.2899	+ .0070	− .004	+ 9 38 15.55	5.803	.462	− .04	4	[illegible]
2049	BD+19° 819	G5	9.1	9.4	52 49.562	3.5185	+ .0094	− .0029	+19 12 43.50	5.792	.494	− .025	4	18.03
2050	BD+29° 771	A0	7.86	8.2	52 55.925	3.8115	+ .0125	+ .0018	+30 0 8.83	5.783	.535	− .018	4	18.53
2051	Brad 684 br.	K0	5.99	5.98	4 52 57.242	+3.6377	+ .0104	+ .0004	+23 49 29.90	+5.781	− .510	− .025	4	18.46
2052	BD+44° 1068		8.7	9.22	52 57.809	4.3136	+ .0200	− .002	+44 7 13.89	5.780	.604	− .01	6	17.56
2053	BD−10° 1053	G5	9.81		53 2.222	2.8477	+ .0043	− .0010	− 9 58 15.86	5.774	.400	− .074	4	19.66
2054	BD− 1° 762	F2	6.23	6.63	53 13.504	3.0461	+ .0052	− .0030	− 1 11 26.91	5.758	.428	− .027	4	19.54
2055	k Tauri	B9	5.65	5.55	53 15.456	3.6677	+ .0108	+ .0022	+24 55 41.54	5.755	.515	− .060	4	19.81
2056	BD+57° 849	A0	8.87	8.65	4 53 26.848	+5.1054	+ .0360	− .003	+57 47 33.84	+5.739	− .716	+ .02	4	19.40
2057	CD−24° 2700	K5	8.5	8.36	53 29.499	2.4965	+ .0033	+ .0008	−24 13 37.02	5.736	.351	.000	4 5	20.21 19.52
2058	BD−22° 959	K2	8.3	8.69	53 33.823	2.5511	+ .0034	.0000	−22 9 44.02	5.730	.358	+ .010	5	19.08
2059	BD+28° 724	G5	9.4	9.1	53 42.915	3.7731	+ .0120	+ .0040	+28 40 18.93	5.717	.530	− .172	4	20.03
2060	Brad 683 br.	A0	5.08	5.68	53 49.336	4.0653	+ .0158	+ .0042	+37 46 14.51	5.708	.571	− .104	6	20.47
2061	BD+ 3° 730	A0	9.17	9.2	4 54 0.895	+3.1626	+ .0060	− .0003	+ 4 0 41.39	+5.692	− .445	− .015	4	19.49
2062	BD+61° 746	A0	8.97	8.9	54 1.64	5.4862	+ .0454	− .004	+62 2 7.54	5.691	.769	.00	4	18.62
2063	BD+32° 860	K5	8.92	9.1	54 3.052	3.8880	+ .0133	+ .003	+32 27 56.93	5.689	.546	− .02	4	19.37
2064	BD−14° 1003	B3	5.87	6.38	54 4.998	2.7448	+ .0038	+ .0032	−14 21 16.67	5.686	.386	+ .008	4	18.20
2065	Brad 695	K0	4.73	4.86	54 24.046	3.1083	+ .0056	− .0002	+ 1 35 32.07	5.660	.437	− .005	4	18.86
2066	Wi (1) 4h 1106	B8	5.98	6.39	4 54 26.930	+3.4024	+ .0079	− .0005	+14 25 19.01	+5.656	− .478	− .011	4	18.44
2067	BD+83° 129		8.72	8.42	54 31.91	14.2095	+ .6038	− .0151	+83 25 56.79	5.649	1.989	+ .020	5	18.74
2068	BD+77° 179	F5	8.47	8.48	54 45.89	9.0514	+ .1938	− .0025	+77 53 31.44	5.629	1.269	− .004	4	18.32
2069	BD+69° 293	G5	8.84	8.72	54 58.02	6.5890	+ .0792	+ .0012	+69 57 20.03	5.612	.924	− .005	4	19.24
2070	BD+15° 713	F5	6.70	7.16	55 8.699	3.4358	+ .0082	+ .0068	+15 47 50.28	5.597	.483	− .034	4	18.16
2071	BD−18° 966	K5	7.20	6.87	4 55 11.940	+2.6575	+ .0035	+ .0002	−17 55 42.28	+5.592	− .374	+ .020	4	18.22
2072	BD+48° 1196	B8	8.4	8.00	55 26.990	4.5342	+ .0230	− .002	+48 42 18.58	5.571	.638	.00	4	19.09
2073	BD− 3° 964	F5	9.6		55 48.662	2.9891	+ .0049	− .0020	− 3 43 25.77	5.541	.421	− .013	4	18.82
2074	CD−28° 1879	G5	7.5	7.31	55 58.802	2.3735	+ .0032	+ .0014	−28 33 41.48	5.527	.335	+ .035	4	17.41
2075	BD+12° 699	A0	8.2	8.77	56 12.866	3.3572	+ .0073	− .002	+12 29 10.27	5.507	.473	.00	4	17.98
2076	ε Aurigæ	F5	Var.	3.9	4 56 13.427	+4.3009	+ .0188	+ .0005	+43 42 22.91	+5.506	− .605	− .013	4	18.21
2077	10 Camelop	G0	4.22	3.93	56 17.63	5.3281	+ .0398	+ .0003	+60 19 37.23	5.501	.750	− .013	4	18.14
2078	BD+53° 842	K5	8.22	8.08	56 20.756	4.8186	+ .0284	− .002	+53 38 34.41	5.496	.678	+ .02	4	18.34
2079	BD−16° 1018	A0	8.5	7.99	56 24.722	2.7062	+ .0037	+ .0008	−15 55 2.04	5.490	.381	+ .029	4	19.18
2080	BD+22° 800	K0	8.75	8.71	56 40.041	3.6181	+ .0097	− .001	+22 59 14.53	5.469	.510	− .03	4	18.78
2081	BD+26° 776	G5	8.60	[illegible]	4 56 48.792	+3.7148	+ .0107	+ .0014	+26 32 0.61	+5.457	− .523	+ .031	4	19.02
2082	ζ Aurigæ	*	3.94	3.53	56 52.932	4.1891	+ .0170	+ .0010	+40 57 37.42	5.451	.590	− .030	4	18.28
2083	BD+31° 849	F0	8.77	8.80	57 6.250	3.8501	+ .0122	− .0004	+31 8 52.52	5.432	.542	− .013	4	18.02
2084	BD+ 2° 836	G5	8.77	[illegible]	57 26.988	3.1354	+ .0056	− .0019	+ 2 47 26.45	5.403	.442	+ .005	4	18.30
2085	Grmb 915	A0	6.20	6.30	57 41.714	4.2047	+ .0170	+ .0008	+41 19 38.78	5.383	.593	− .011	5	17.33
2086	BD+36° 988	A0	9.59		4 57 54.830	+4.0143	+ .0143	+ .001	+36 10 37.77	+5.364	− .566	− .02	4	18.48
2087	BD+47° 1089	K0	7.08	7.15	58 3.922	4.4807	+ .0212	.000	+47 33 6.12	5.351	.632	− .06	4	18.76
2088	BD−21° 1045	F5	8.3	8.0	58 5.354	2.5581	+ .0033	.0000	−21 46 55.92	5.349	.361	+ .132	4	18.71
2089	BD−11° 1043	K3	10.5		58 15.824	2.8205	+ .0040	+ .0013	−11 4 38.84	5.335	.399	+ .008	5	18.12
2090	ι Tauri	A5	4.70	5.20	58 18.679	3.5796	+ .0091	+ .0048	+21 28 36.91	5.331	.505	− .047	4	18.33
2091	BD+14° 817	F8	9.1	9.2	4 58 30.153	+3.4096	+ .0076	− .004	+14 39 7.29	+5.315	− .481	− .02	4	19.04
2092	BD+43° 1177	B9	8.05	7.70	58 48.004	4.3000	+ .0182	+ .002	+43 36 57.36	5.289	.607	− .02	5	18.35
2093	Pi 4h 289	K0	5.01	4.76	58 54.570	2.4331	+ .0032	+ .0065	−26 23 15.64	5.280	.344	− .085	4	19.08
2094	BD+33° 948	F8	8.58	8.57	58 55.794	3.9147	+ .0128	+ .002	+33 8 59.77	5.278	.553	− .02	4	18.81
2095	BD+53° 849	K5	9.20	9.3	59 1.387	4.8065	+ .0268	+ .002	+53 16 7.03	5.271	.678	.00	4	18.61
2096	BD+10° 700	K0	9.48		4 59 6.474	+3.3232	+ .0070	− .003	+10 59 32.17	+5.263	− .470	− .04	4	18.44
2097	Brad 691	B3	5.31	5.28	59 10.812	5.2073	+ .0352	− .0003	+58 51 43.89	5.257	.734	− .007	4	18.28
2098	Lac 1695.	K0	6.00		59 21.144	2.2703	+ .0042	− .0021	−31 53 13.56	5.243	.321	+ .057	4	19.19
2099	BD− 7° 961	K0	8.7	8.00	59 22.260	2.9650	+ .0043	− .002	− 7 24 26.42	5.241	.411	+ .01	4	18.62
2100	BD+17° 827	K0	8.86	8.8	59 22.664	3.4705	+ .0081	− .002	+17 23 15.34	5.241	.491	+ .04	4	18.71

2051. $12^{m}3$, $6''3$, 9°.

2060. $7^{m}7$, $5''7$, 357°.

2076. $3^{m}3$ to $4^{m}1$.

2082. K0, B1.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2101	BD+ 8° 845		*9.66*		4 59 41.232	+3.2598	+0.0063	−0.001	+ 8 15 0.82	+5.215	−0.462	0.00	[illegible]	18.65
2102	BD− 9° 1062	K0	9.1		59 41.428	2.8518	+ .0041	− .001	− 9 42 52.96	5.214	.404	− .03	4	18.52
2103	CD−29° 2020	A2	8.74	8.3	59 47.561	2.3302	+ .0031	− .0035	−29 54 47.87	5.205	.330	+ .040	4	19.22
2104	BD+ 5° 798		*9.21*	9.2	59 52.552	3.1902	+ .0058	− .0011	+ 5 12 8.97	5.199	.451	− .017	4	18.36
2105	BD−19° 1085	A0	8.6	8.2	59 52.979	2.6128	+ .0034	− .0020	−19 36 45.11	5.198	.370	+ .040	4	18.63
2106	11 Orionis	B9	4.65	4.93	4 59 59.740	+3.4257	+ .0076	+ .0013	+15 17 38.09	+5.189	− .484	− .036	4	18.57
2107	Lac 1704	A2	5.55	5.7	5 0 34.310	2.4841	+ .0032	+ .0033	−24 29 54.86	5.140	.352	− .007	4	19.15
2108	BD+51° 1027	K5	*7.82*	7.63	0 45.280	4.7026	+ .0242	− .0007	+51 35 54.71	5.124	.665	+ .002	4	18.06
2109	BD+22° 818	B5	6.66	7.06	0 47.801	3.6199	+ .0092	− .001	+22 57 7.01	5.121	.513	− .02	4	17.82
2110	BD− 1° 793		8.1	8.36	0 48.740	3.0390	+ .0050	.0000	− 1 29 35.27	5.119	.430	− .034	4	18.61
2111	Wi (2) 4^h 1293	B8	6.94	7.33	5 0 52.823	+3.9380	+ .0127	− .0008	+33 48 37.23	+5.114	− .557	− .010	4	18.33
2112	η Aurigæ	B3	3.28	3.64	0 54.037	4.2010	+ .0162	+ .0027	+41 7 39.25	5.112	.595	− .075	5 4	17.30 17.84
2113	Lal 9579	B5	5.98	6.34	0 54.241	3.0016	+ .0048	− .0009	− 3 8 58.08	5.112	.425	− .006	4	18.35
2114	BD+50° 1125	A2	*8.97*	9.1	1 48.106	4.6431	+ .0228	+ .002	+50 31 20.94	5.036	.657	− .02	4	18.01
2115	CD−25° 2206	G5	7.9	7.9	2 0.447	2.4523	+ .0031	+ .0068	−25 36 56.17	5.018	.349	− .024	[illegible]	18.51
2116	ε Leporis	K5	3.29	3.12	5 2 4.436	+2.5374	+ .0032	+ .0019	−22 28 39.15	+5.013	− .361	− .067	4	18.29
2117	Pi 4^h 254	A0	5.38	5.93	2 16.00	7.5406	+ .1034	+ .0040	+73 50 44.96	4.996	1.067	− .032	8	17.92
2118	BD+35° 986	G0	9.07	9.5	2 27.552	3.9838	+ .0129	+ .0079	+35 8 20.79	4.980	.565	− .123	4	17.76
2119	BD−15° 944	K0	9.0		2 34.536	2.7126	+ .0035	− .0020	−15 32 43.28	4.970	.385	+ .048	4	18.35
2120	BD+58° 814	F8	*9.33*		2 41.540	5.2247	+ .0335	+ .003	+58 57 56.48	4.960	.740	+ .01	4	18.43
2121	BD+ 0° 945	G5	8.4	8.46	5 2 41.650	+3.0856	+ .0051	+ .0002	+ 0 34 17.13	+4.960	− .438	− .005	4	19.12
2122	BD− 5° 1156	F5	7.18	7.5	2 58.641	2.9532	+ .0044	+ .0045	− 5 16 15.99	4.936	.419	− .020	4	18.41
2123	BD+12° 732	F5	8.09	8.08	3 10.552	3.3584	+ .0068	.000	+12 26 9.96	4.920	.477	+ .02	5	18.24
2124	Rad (45) 1311	A5	6.54	6.52	3 14.97	20.963	+1.275	+ .0280	+85 51 28.89	4.913	2.965	− .068	8	18.14
2125	BD+75° 211		9.7	9.2	3 15.89	8.0344	+ .1215	+ .0008	+75 21 55.59	4.912	1.137	− .013	4	18.78
2126	BD+15° 749	K2	7.5	7.26	5 3 30.382	+3.4382	+ .0073	+ .002	+15 45 4.10	+4.891	− .488	− .02	[illegible]	17.94
2127	Wi (1) 4^h 1379	F8	6.14	5.9	3 41.444	2.7831	+ .0037	+ .0083	−12 35 37.43	4.875	.396	− .106	4	18.01
2128	BD+65° 459	A0	*8.70*	8.51	3 43.10	5.9727	+ .0506	+ .0015	+65 54 57.36	4.873	.847	− .022	5	17.54
2129	BD+ 3° 777	A0	*7.67*	7.37	3 53.796	3.1553	+ .0054	+ .0008	+ 3 38 40.81	4.858	.448	− .013	4	17.45
2130	β Eridani	A3	2.92	3.07	3 54.940	2.9550	+ .0044	− .0059	− 5 11 20.00	4.856	.420	− .079	94 82	19.21 19.45
2131	BD+42° 1184	G5	8.0	8.27	5 4 5.665	+4.2640	+ .0163	− .014	+42 34 23.81	+4.841	− .606	− .15	4	17.96
2132	Brad 710	G5	6.55	6.10	4 7.041	3.5385	+ .[illegible]	+ .0003	+19 45 25.65	4.840	.503	− .018	5	18.29
2133	BD+38° 1045	Ma	*7.84*	7.73	4 35.137	4.0964	+ .0138	.000	+38 16 19.47	4.800	.581	− .03	[illegible]	18.29
2134	BD+40° 1189		8.5	8.6	4 42.537	4.1833	+ .0149	+ .003	+40 33 31.61	4.789	.595	+ .01	5	19.20
2135	Wi (2) 4^h 1421 *br.*	A3	6.11	5.87	4 43.557	3.7607	+ .0101	+ .0038	+27 55 48.24	4.788	.535	− .068	[illegible]	18.16
2136	BD+ 8° 873	K2	8.5	8.67	5 4 44.868	+3.2795	+ .0060	.000	+ 9 3 11.29	+4.786	− .466	+ .02	[illegible]	17.92
2137	Pi 4^h 294	F5	5.59	5.62	4 45.230	4.4578	+ .0188	+ .0064	+46 51 53.15	4.786	.633	− .157	[illegible]	18.46
2138	Brad 716	A2	5.42	5.72	4 55.459	3.2952	+ .0061	+ .0050	+ 9 43 40.16	4.771	.468	− .006	5	18.37
2139	BD+14° 840	Ma	*8.22*	7.99	4 57.362	3.4025	+ .0069	− .002	+14 15 16.43	4.768	.484	+ .01	[illegible]	18.67
2140	BD−17° 1031	F5	8.0	8.02	5 1.070	2.6652	+ .0034	− .0009	−17 25 50.94	4.763	.379	− .002	[illegible]	19.07
2141	BD− 7° 985	[illegible]	8.28	8.4	5 5 5.212	+2.9071	+ .0041	.000	− 7 16 5.82	+4.757	− .414	+ .02	[illegible]	18.14
2142	λ Eridani	B2	4.34	4.28	5 19.014	2.8704	+ .0040	+ .0002	− 8 51 20.54	4.737	.408	− .008	[illegible]	19.02
2143	CD−27° 2094		9.1		5 32.549	2.4000	+ .0031	+ .0044	−27 22 52.51	4.718	.341	+ .008	[illegible]	18.75
2144	BD+28° 755	A0	*8.39*	7.93	5 41.718	3.7818	+ .0102	− .0022	+28 37 40.56	4.705	.537	− .001	[illegible]	18.32
2145	BD+22° 843	K5	*9.58*		5 43.427	3.6072	+ .0085	.000	+22 21 45.60	4.703	.514	.00	[illegible]	18.77
2146	Lal 9530	A0	7.12	7.14	5 5 50.53	+6.1918	+ .0543	+ .0032	+67 23 12.25	+4.693	− .879	− .072	12	19.06
2147	BD+20° 897	F0	7.75	8.38	6 2.390	3.5578	+ .0080	+ .002	+20 28 13.26	4.676	.506	.00	4	18.10
2148	BD+49° 1321		9.2	9.3	6 10.302	4.5819	+ .0202	− .003	+49 15 59.59	4.665	.651	− .05	4	18.04
2149	BD+ 3° 796	K0	*9.48*		6 29.980	3.1531	+ .0052	+ .0015	+ 3 32 18.62	4.637	.449	+ .012	4	17.96
2150	BD+33° 972	G5	*9.39*		6 41.614	3.9397	+ .0116	− .003	+33 41 35.32	4.620	.560	− .04	4	18.42
2151	BD−21° 1090	K2	8.8		5 6 54.413	+2.5506	+ .0032	− .0012	−21 52 21.60	+4.602	− .364	+ .078	5 4	18.02 18.85
2152	BD+62° 736	A2	*8.57*	8.48	7 11.62	5.5664	+ .0380	+ .001	+62 26 52.15	4.578	.792	− .02	[illegible]	18.06
2153	BD+45° 1069		9.7		7 17.165	4.3829	+ .0168	− .002	+45 11 53.51	4.570	.623	.00	[illegible]	18.46
2154	BD− 2° 1165	F2	5.93	6.24	7 17.476	3.0139	+ .0044	+ .0054	− 2 35 18.54	4.570	.430	+ .001	4	18.19
2155	BD+24° 782	F0	8.0	8.08	7 18.780	3.6570	+ .0087	− .0004	+24 10 57.54	4.568	.521	− .006	[illegible]	18.26
2156	BD+63° 573		*9.57*	9.1	5 7 30.80	+5.6532	+ .0396	− .003	+63 14 9.53	+4.551	− .804	+ .02	[illegible]	18.54
2157	BD+26° 797	F8	*8.67*	8.2	7 40.432	3.7122	+ .0092	− .0016	+26 9 46.20	4.537	.530	− .051	[illegible]	18.52
2158	μ Aurigæ	A3	4.78	5.23	7 57.041	4.1044	+ .0132	− .0015	+38 23 27.92	4.513	.585	− .074	[illegible]	17.69
2159	BD+ 6° 866	F8	8.8		8 10.011	3.2192	+ .0055	− .005	+ 6 24 59.85	4.495	.459	+ .05	4	18.02
2160	BD+17° 872	G5	*8.58*	8.49	8 11.432	3.4974	+ .0073	− .004	+18 3 38.07	4.493	.498	− .05	5	17.11

2135. Δm2, 12″, 27°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2161	BD+ 2° 886		*9.03*	8.2	5 8 34.712	+3.1341	+0.0050	−0.0018	+ 2 41 57.13	+4.460	−0.447	+0.004	4	17.92
2162	BD− 1° 829	K	9.4	9.3	8 35.882	3.0353	+ .0045	+ .0002	− 1 38 34.34	4.458	.433	− .027	4	18.64
2163	BD−19° 1120	K0	9.1	8.8	9 7.916	2.6120	+ .0033	− .0054	−19 27 52.66	4.413	.373	+ .020	5	18.11
2164	BD+21° 796	A2	7.7	7.38	9 19.257	3.5766	+ .0077	− .001	+21 7 50.32	4.397	.510	.00	5	17.54
2165	μ Leporis	A0	3.30	4.06	9 20.227	2.6915	+ .0034	+ .0028	−16 17 57.24	4.395	.385	− .028	4	17.61
2166	19 H Camelop *br.*	F8	5.24	5.24	5 9 20.73	+9.8706	+ .1870	− .0275	+79 8 32.83	+4.395	−1.406	+ .156	9	18.00
2167	BD−13° 1092 *br.*	B8	4.52	4.70	9 32 134	2.7708	+ .0036	− .0020	−13 2 5.98	4.378	.396	− .012	4	17.59
2168	CD−23° 2529		10.1		9 38.841	2.5101	+ .0031	− .0004	−23 19 56.95	4.369	.359	− .004	4	18.02
2169	Brad 729	A0	6.16	6.08	9 42.436	2.8838	+ .0039	+ .0003	− 8 14 27.61	4.364	.413	− .010	4	18.11
2170	BD−11° 1105	A2	8.6	7.87	9 42.677	2.8094	+ .0037	− .0029	−11 24 53.56	4.363	.401	+ .018	4	18.58
2171	BD+54° 874	K0	7.81	7.66	5 10 28.059	+4.8748	+ .0230	+ .005	+54 5 4.40	+4.299	− .696	− .01	4	18.46
2172	BD+52° 938	F2	*9.55*	9.5	10 30.804	4.7533	+ .0212	+ .004	+52 9 48.03	4.295	.678	− .07	4	18.65
2173	BD+34° 978	B8	*7.64*	7.78	10 35.564	3.9643	+ .0112	+ .0018	+34 20 8.76	4.288	.566	− .130	4	17.63
2174	β Orionis *br.*	B8	0.34	0.60	10 41.550	2.8824	+ .0038	+ .0001	− 8 17 35.21	4.279	.412	− .001	103 74	19.22 19.03
2175	α Aurigæ	G0	0.21		10 46.568	4.4209	+ .0163	+ .0081	+45 55 6.42	4.272	.631	− .429	4	17.65
2176	BD−15° 979		9.9		5 10 48.081	+2.7201	+ .0034	− .0025	−15 6 44.20	+4.270	− .389	.000	4	19.25
2177	CD−27° 2148	K0	9.0	8.3	11 1.534	2.3957	+ .0030	− .0005	−27 24 14.39	4.251	.343	− .026	4	18.36
2178	BD+ 8° 904	K2	8.2	8.30	11 17.252	3.2734	+ .0056	.000	+ 8 44 2.74	4.228	.468	+ .03	4 3	17.77 18.65
2179	BD+11° 756	A0	5.50	5.81	11 37.362	3.3327	+ .0058	− .0007	+11 15 8.49	4.200	.477	− .009	4	18.59
2180	BD+60° 873	A2	8.96		11 46.51	5.3512	+ .0305	− .003	+60 9 44.48	4.187	.765	− .02	4	17.42
2181	BD+31° 911	A	*9.50*		5 11 59.824	+3.8897	+ .0101	− .0012	+32 0 27.65	+4.168	− .556	− .025	4	18.12
2182	BD− 4° 1085	A	9.7		12 8.973	2.9686	+ .0041	+ .0031	− 4 33 9.44	4.155	.425	− .007	4	18.88
2183	CD−29° 2143	K0	7.31	6.4	12 14.776	2.3225	+ .0030	+ .0012	−29 50 54.79	4.146	.333	+ .008	4	19.37
2184	BD+47° 1124	A2	8.2	8.30	12 32.880	4.4872	+ .0166	+ .003	+47 14 36.47	4.121	.642	+ .02	4	18.88
2185	BD+57° 874	B3	6.23	6.18	12 33.474	5.1683	+ .0268	+ .0028	+58 1 58.37	4.120	.738	− .027	4	17.95
2186	BD− 7° 1021	A5	8.0	8.28	5 12 43.353	+2.9054	+ .0038	− .001	− 7 17 28.16	+4.106	− .416	+ .04	4	18.87
2187	CD−25° 2339	G0	9.03		12 52.935	2.4608	+ .0030	− .0012	−25 4 7.99	4.092	.354	− .020	4	18.43
2188	BD+43° 1240	K2	8.5	8.2	12 54.270	4.3377	+ .0147	.000	+44 2 11.68	4.090	.621	+ .01	4	17.97
2189	BD+19° 888	F5	*8.57*	8.4	13 5.772	3.5461	+ .0072	− .002	+19 53 25.64	4.073	.508	− .04	4	18.71
2190	BD+ 5° 875	G5	7.26	7.50	13 16.249	3.1963	+ .0050	+ .0016	+ 5 23 47.06	4.059	.456	− .006	4	18.45
2191	λ Aurigæ	G0	4.85	4.98	5 13 30 603	+4.1722	+ .0126	+ .0460	+40 1 46.14	+4.038	− .597	− .658	6	19.28
2192	BD+13° 852	Mb	*7.96*	7.66	13 33.340	3.3829	+ .0060	− .002	+13 19 57.59	4.034	.485	.00	4	17.61
2193	BD+27° 750	A2	*8.59*	8.4	13 40.530	3.7690	+ .0088	− .0015	+28 0 22.72	4.023	.540	.000	4	18.05
2194	BD+39° 1251	K5	8.2	7.98	13 40.965	4.1517	+ .0124	.000	+39 29 38.03	4.023	.595	.00	6	17.37
2195	τ Orionis *br.*	B5	3.63	3.71	13 43.267	2.9136	+ .0038	− .0011	− 6 55 47.39	4.020	.418	− .007	81 65	19.11 19.15
2196	BD− 8° 1078	G0	8.5	8.8	5 13 55 222	+2.8715	+ .0037	.000	− 8 44 7.74	+4.003	− .412	− .05	4	18.35
2197	BD−19° 1135	K2	8.4	8.0	14 12.883	2.6075	+ .0031	+ .0005	−19 33 13.83	3.978	.374	+ .006	4	18.22
2198	BD+ 0° 1003	A5	*8.02*	8.38	14 15.538	3.0843	+ .0045	+ .0002	+ 0 30 29.96	3.974	.443	+ .002	4	18.70
2199	BD+59° 868	G5	*8.55*	8.83	14 15.557	5.2607	+ .0273	+ .001	+59 5 35.37	3.974	.752	− .05	4	18.63
2200	Brad 741	K0	5.14	5.1	14 28.086	3.6024	+ .0074	+ .0021	+22 0 53.46	3.956	.516	− .089	4	18.13
2201	ο Columbæ	K0	4.91		5 14 35.915	+2.1562	+ .0031	+ .0065	−34 58 22.02	+3.945	− .310	− .346	4	19.26
2202	BD+48° 1253		9.5	8.6	14 42.628	4.5738	+ .0169	.000	+48 52 55.99	3.935	.655	− .01	4	18.09
2203	Oelt 5729	G5	6.75	6.38	14 45.684	4.8877	+ .0213	− .0021	+54 10 15.02	3.931	.701	+ .031	4	18.56
2204	Brad 744	F5	5.45	5.75	15 0.782	3.1302	+ .0047	− .0010	+ 2 30 50.44	3.909	.449	− .067	4	18.94
2205	BD+68° 384		*9.07*	9.4	15 4.30	6.4392	+ .0506	+ .0055	+68 43 35.10	3.904	.922	+ .014	4	18.79
2206	Lal 9986	G0	5.93	6.24	5 15 16 884	+2.6413	+ .0032	+ .0265	−18 12 52.05	+3.887	− .379	+ .043	4	19.02
2207	BD+40° 1255	B9	*7.46*	7.18	15 17.994	4.2045	+ .0125	+ .001	+40 48 14.49	3.885	.603	.00	6	20.71
2208	BD+16° 755	K2	*8.41*	8.46	15 21.330	3.4648	+ .0064	.000	+16 38 55.61	3.880	.497	.00	4	18.04
2209	BD+25° 818	A2	8.36	8.41	15 22.798	3.6866	+ .0078	− .0009	+25 5 23.88	3.878	.520	− .005	4	17.65
2210	BD− 1° 861		9.0		15 36.785	3.0398	+ .0040	+ .0009	− 1 26 17.39	3.858	.437	− .017	4	18.62
2211	BD+18° 827	K7	*8.66*	8.84	5 15 39.771	+3.5118	+ .0066	.000	+18 30 44.43	+3.854	− .504	.00	4	18.62
2212	λ Leporis	B1	4.29	4.70	15 53.301	2.7636	+ .0034	.0000	−13 15 30.33	3.834	.397	+ .003	4	17.68
2213	BD−11° 1134	B8	8.2	7.94	15 55.642	2.8150	+ .0035	+ .0005	−11 6 58.96	3.831	.405	− .002	4	18.23
2214	W_1 (1) 5^h 260	A0	7.44	7.37	15 58.463	3.3232	+ .0055	− .0008	+10 48 36.55	3.827	.477	− .034	4	17.42
2215	BD+14° 881	B9	8.24	8.36	16 1.653	3.4237	+ .0060	− .001	+14 58 44.23	3.822	.491	− .02	4	18.55
2216	12 G Columbæ	A0	5.75	5.65	5 16 12.344	+2.3912	+ .0029	− .0008	−27 27 1.06	+3.807	− .343	− .014	4	19.09
2217	BD+51° 1063	A2	*8.65*	8.66	16 20.148	4.7016	+ .0198	+ .001	+51 8 47.32	3.796	.671	− .01	4	17.92
2218	BD+36° 1099		*9.39*	8.8	16 30.801	4.0418	+ .0106	− .001	+36 26 35.24	3.781	.580	.00	6	19.88
2219	Carr 727	A0	6.55	7.00	16 33.47	20.160	+ .887	− .015	+85 36 38.95	3.777	2.880	+ .004	8 9	18.48 18.15
2220	BD+27° 762	M0	*9.01*	8.8	16 38.104	3.7517	+ .0083	+ .0009	+27 21 10.79	3.770	.539	+ .014	4	17.97

2166. $8^{m}0$, 10″, 47°.

2167. $7^{m}9$, 2″5, 0°.

2174. $6^{m}7$, 9″6, 202°.

2195. 12^{m}, 3″7, 51°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2221	BD+80° 168	K0	*7.53*	7.42	5 16 41.86	+11.3485	+0.2256	+0.0128	+80 59 15.65	+3.765	−1.626	+0.010	4	18.41
2222	BD−13° 1131	G5	8.0	7.75	16 52.189	2.7584	+ .0034	− .0014	−13 27 53.39	3.750	.397	− .035	5	18.30
2223	BD+22° 884	K0	9.0	8.7	17 8.146	3.6267	+ .0072	.000	+22 52 32.79	3.727	.522	.00	4	18.08
2224	Pulk (55) 824	B2	5.71	5.94	17 22.158	3.2655	+ .0050	+ .0009	+ 8 21 1.74	3.707	.469	.000	4	17.89
2225	BD−21° 1137	B9	8.0		17 29.939	2.5654	+ .0030	+ .0006	−21 7 7.89	3.696	.369	+ .004	4	18.96
2226	CD−25° 2380	K5	9.4		5 17 36.013	+ 2.4429	+ .0029	+ .0020	−25 37 3.61	+3.687	− .352	− .002	4	19.38
2227	BD+ 6° 907	A0	9.7		17 37.066	3.2281	+ .0049	− .003	+ 6 44 50.42	3.686	.463	− .02	4	19.05
2228	BD+61° 783	B9	*8.10*	7.83	17 38.74	5.5176	+ .0296	− .002	+61 45 5.16	3.683	.792	− .02	4	19.11
2229	*o* Orionis	B3	4.65	5.16	17 40.650	3.0621	+ .0042	− .0003	− 0 27 37.07	3.681	.440	− .003	4	19.00
2230	BD− 5° 1235	F8	9.30		17 47.369	2.9589	+ .0038	+ .0001	− 4 57 8.00	3.671	.425	+ .023	5	18.48
2231	Oelt 5741	B9	7.04	6.69	5 17 48.20	+ 6.7130	+ .0538	+ .0034	+70 9 21.44	+3.670	− .963	− .032	12	18.86
2232	BD− 3° 1075	B8	6.96	7.97	17 57.927	3.0029	+ .0040	− .0009	− 3 2 28.38	3.656	.432	+ .009	5	17.49
2233	BD+33° 1028		*8.97*	8.4	18 6.567	3.9395	+ .0094	+ .001	+33 24 31.54	3.643	.566	+ .01	4	18.75
2234	CD−23° 2659	K	10.5	ft.	18 18.165	2.4902	+ .0029	+ .0003	−23 54 7.36	3.627	.359	.000	4	19.59
2235	BD+50° 1168	A	*9.17*		18 53.074	4.6565	+ .0165	+ .001	+50 17 59.65	3.577	.669	.00	4	18.21
2236	σ Aurigæ *br.*	K5	5.22	5.42	5 19 12.769	+ 4.0751	+ .0104	− .0001	+37 18 43.46	+3.549	− .587	− .027	4	17.34
2237	BD+30° 873	F5	9.11		19 21.221	3.8358	+ .0083	+ .0001	+30 7 6.11	3.536	.552	+ .022	5	19.88
2238	BD+20° 945	K0	8.45	8.8	19 31.064	3.5533	+ .0064	.000	+20 4 1.92	3.522	.511	− .04	4	18.58
2239	BD+66° 394 *br.*	A5	*8.85*		19 37.78	6.1163	+ .0388	+ .0017	+66 37 20.82	3.513	.879	+ .002	4	18.46
2240	BD−14° 1117	K0	7.91	7.86	19 41.018	2.7224	+ .0032	− .0002	−14 54 26.66	3.508	.392	+ .014	4	19.07
2241	BD+44° 1195 *m.*	A2	*8.84*	8.57	5 19 44.018	+ 4.3577	+ .0129	+ .001	+44 19 16.27	+3.504	− .627	− .01	4	18.77
2242	BD− 7° 1061	K5	8.6	8.50	19 44.244	2.9118	+ .0036	− .002	− 6 58 19.71	3.503	.419	.00	4	18.92
2243	BD+56° 1027	G0	*9.25*	9.2	19 45.491	5.0653	+ .0215	− .002	+56 33 39.19	3.502	.730	− .03	4	19.20
2244	BD+87° 38		*9.52*		19 46.37	32.465	+2.346	− .015	+87 26 12.33	3.500	4.662	+ .005	4	18.87
2245	BD+14° 898	G0	9.0		19 47.400	3.4085	+ .0056	− .003	+14 18 54.07	3.499	.490	.00	4	19.11
2246	BD+10° 772	K0	*9.90*	ft.	5 19 57.280	+ 3.3094	+ .0050	+ .003	+10 11 49.14	+3.485	− .477	+ .04	4	18.76
2247	Lac 1823	F5	6.44	6.76	19 59.090	2.4085	+ .0029	+ .0017	−26 46 48.95	3.482	.347	+ .007	4	18.73
2248	BD+46° 1015	K0	*8.36*	7.85	20 16.208	4.4719	+ .0139	.000	+46 44 54.38	3.457	.643	− .05	4	19.08
2249	CD−29° 2220		8.8		20 25.906	2.3252	+ .0029	− .0038	−29 35 20.67	3.443	.336	− .025	4	19.59
2250	η Orionis *m.*	B1	3.44	3.2	20 27.231	3.0159	+ .0039	+ .0004	− 2 28 11.15	3.442	.435	+ .001	4	19.36
2251	25 Orionis	B3	4.73	5.10	5 20 35.596	+ 3.1135	+ .0043	− .0007	+ 1 46 27.13	+3.430	− .448	− .018	4	19.39
2252	BD+40° 1285		*9.33*	9.4	20 37.296	4.1848	+ .0110	+ .001	+40 11 2.13	3.427	.602	− .04	4	18.94
2253	BD+12° 790	K2	*9.46*	8.7	20 49.574	3.3630	+ .0052	− .001	+12 26 0.75	3.410	.484	− .01	4	17.94
2254	γ Orionis	B2	1.70	2.11	20 50.351	3.2176	+ .0046	− .0005	+ 6 16 42.02	3.408	.464	− .019	52 45	18.75 18.45
2255	BD+74° 244	A0	*8.96*	9.4	21 6.49	7.7731	+ .0752	+ .0067	+74 20 46.00	3.385	1.118	− .010	4	18.41
2256	β Tauri	B8	1.78	2.14	5 21 13.965	+ 3.7892	+ .0077	+ .0024	+28 32 28.51	+3.375	− .546	− .177	51 50	18.64 18.60
2257	BD− 8° 1117	A3	9.2	9.1	21 15.028	2.8689	+ .0035	− .001	− 8 47 41.59	3.373	.414	.00	4	18.76
2258	BD+ 9° 830 *br.*	K5	8.3	8.46	21 19.119	3.2851	+ .0048	− .004	+ 9 9 29.98	3.367	.474	.00	4	17.80
2259	BD+16° 775	B3	6.18	6.58	21 28.235	3.4662	+ .0057	− .001	+16 37 48.77	3.354	.499	.00	4	18.44
2260	BD−18° 1085	K2	8.4	8.47	21 36.149	2.6244	+ .0030	+ .0020	−18 47 27.33	3.343	.379	+ .008	4	18.53
2261	BD+71° 308		*8.88*	8.9	5 21 54.97	+ 7.1328	+ .0577	− .0210	+72 0 58.37	+3.315	−1.027	− .009	4	18.12
2262	BD−16° 1141	G0	8.6	8.06	22 29.515	2.6770	+ .0030	+ .0004	−16 42 15.45	3.266	.387	+ .062	4	17.87
2263	Brad 767	B3	5.31	5.61	22 29.946	3.4984	+ .0058	+ .0006	+17 53 40.65	3.265	.505	− .014	4	17.43
2264	BD+31° 974	A2	9.0		22 33.877	3.8960	+ .0083	+ .0027	+31 58 50.31	3.260	.562	− .015	4	18.30
2265	17 Camelop	K5	5.75	5.66	22 36.53	5.6609	+ .0283	+ .0008	+63 0 8.23	3.256	.816	− .001	4	17.98
2266	BD+ 1° 1015	B9	*8.78*	8.8	5 22 38.481	+ 3.1188	+ .0042	− .0008	+ 2 0 0.24	+3.253	− .450	− .013	4	18.44
2267	BD+26° 821	K7	*8.78*	8.9	22 48.056	3.7179	+ .0070	+ .0014	+26 4 17.13	3.239	.536	− .010	4	19.14
2268	Pi 5^{h} 102	F5	6.37	6.16	23 21.108	2.7931	+ .0032	+ .0014	−11 58 1.91	3.192	.403	− .054	4	18.80
2269	BD+77° 199	K0	*8.14*	8.48	23 39.99	9.2144	+ .1105	+ .0003	+77 52 26.36	3.165	1.327	− .024	4	18.12
2270	BD+39° 1314		9.4	9.5	24 4.330	4.1547	+ .0099	+ .001	+39 20 31.29	3.129	.599	.00	4	18.35
2271	BD+53° 914	F2	*9.02*	8.7	5 24 10.178	+ 4.8634	+ .0168	+ .006	+53 36 9.94	+3.121	− .701	+ .02	4	17.73
2272	Lal 10313	K0	6.14	6.62	24 11.959	2.5543	+ .0029	+ .0018	−21 26 33.26	3.119	.369	+ .037	4	18.81
2273	BD+45° 1126	K0	8.20	8.38	24 14.964	4.4286	+ .0122	+ .001	+45 45 58.91	3.114	.640	− .01	4	18.11
2274	Lal 10288	B9	6.58	6.96	24 19.890	3.0717	+ .0039	− .0029	− 0 2 40.48	3.107	.444	− .005	4	18.09
2275	BD+21° 857	F8	8.5	8.28	24 28.426	3.5862	+ .0060	− .001	+21 15 8.57	3.095	.518	− .02	4	18.09
2276	BD+ 3° 918	A0	*9.08*		5 24 33.814	+ 3.1451	+ .0041	+ .0001	+ 3 8 18.69	+3.087	− .454	+ .003	4	17.88
2277	Wi (?) 5^{h} 590	F5	6.24	6.42	24 35.545	3.8082	+ .0073	+ .0012	+29 7 25.60	3.085	.519	− .055	4	17.83
2278	BD−10° 1196		9.0		24 45.887	2.8267	+ .0032	+ .0010	−10 33 3.24	3.070	.408	+ .044	5	18.08
2279	CD−24° 3110		10.1		24 47.103	2.4804	+ .0028	− .0008	−24 9 26.09	3.068	.358	− .009	4	18.83
2280	β Leporis *br.*	G0	2.96	3.33	24 49.020	2.5705	+ .0029	+ .0004	−20 49 20.41	3.065	.372	− .094	4	18.46

2236. 12^{m}, 8″.7, 167°.
2239. 12^{m}, 1″.7, 122°.

2241. $9^{m}1$-$10^{m}1$, 0″.3, 232°.
2250. $3^{m}7$-$5^{m}0$, 1″.3, 81°.

2258. 14^{m}, 1″.5, 325°.
2280. $9^{m}6$, 2″.6, 305°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2281	BD− 2° 1263	A0	8.6	8.6	5 25 0.840	+3.0072	+0.0035	−0.0013	− 2 50 23.95	+3.048	−0.435	+0.024	4	18.96
2282	BD+55° 995	F8	*9.60*		25 2.706	4.9917	+ .0178	+ .004	+55 27 39.65	3.045	.721	− .06	5	18.16
2283	Lal 10224	K0	6.09	6.20	25 9.310	4.2373	+ .0103	− .0019	+41 24 2.99	3.036	.612	− .041	6	[illegible]
2284	BD+70° 356	A2	*8.95*	9.4	25 9.60	6.7884	+ .0457	− .0008	+70 25 45.95	3.036	.979	− .004	4	18.37
2285	BD+23° 922	G5	*8.27*	7.90	25 10.808	3.6525	+ .0063	− .002	+23 41 46.07	3.034	.528	.00	4	17.93
2286	BD+69° 327	F5	7.94	7.85	5 25 12.92	+6.6247	+ .0425	+ .0006	+69 36 0.60	+3.031	− .956	+ .073	4	18.51
2287	BD+48° 1278	B8	7.30	7.55	25 40.214	4.5861	+ .0132	− .002	+48 52 27.27	2.992	.662	+ .01	4	18.59
2288	Cape (80) 2445	K0	6.62	7.1	26 2.331	2.3041	+ .0028	− .0005	−30 10 47.39	2.959	.334	+ .013	4	17.82
2289	BD+ 7° 910	K7	9.50		26 7.897	3.2588	+ .0043	− .002	+ 8 0 51.44	2.951	.472	− .03	4	17.74
2290	BD+42° 1314		8.8	8.80	26 29.984	4.3017	+ .0105	− .003	+42 54 38.49	2.920	.621	− .02	4	18.17
2291	BD+52° 967	K0	*8.80*	8.70	5 26 32.807	+4.7692	+ .0148	+ .001	+52 4 12.08	+2.916	− .689	− .03	4	18.22
2292	BD+18° 870	K2	9.0	8.3	26 37.944	3.5270	+ .0054	− .001	+18 57 49.68	2.908	.509	− .01	4	18.53
2293	BD+ 1° 1040		*9.47*		26 48.152	3.0978	+ .0038	− .0001	+ 1 5 13.33	2.893	.448	− .057	5	17.68 19.30
2294	BD+28° 813	F0	8.66	8.8	26 50.363	3.8043	+ .0069	− .0006	+28 57 16.30	2.890	.550	− .005	4	18.14
2295	BD+12° 810	G5	8.3	7.94	26 53.140	3.3659	+ .0048	+ .011	+12 29 57.47	2.886	.487	− .14	4	18.53
2296	BD− 4° 1152	A2	8.0	7.75	5 26 55.017	+2.9729	+ .0035	− .0010	− 4 18 52.67	+2.883	− .430	− .027	4	17.79
2297	CD−23° 2804	G0	9.6		27 20.512	2.5079	+ .0028	.0000	−23 7 15.83	2.847	.364	+ .012	4	19.33
2298	χ Aurigæ	B1	4.88	4.80	27 31.076	3.9037	+ .0074	+ .0005	+32 8 3.37	2.831	.565	− .016	4	17.90
2299	BD+50° 1191	A0	9.22		27 31.347	4.6527	+ .0132	− .002	+50 3 37.86	2.831	.672	.00	4	18.42
2300	BD−15° 1067		9.5		27 41.544	2.7163	+ .0030	− .0056	−15 4 31.72	2.816	.394	+ .011	5 4	18.14 18.89
2301	BD+65° 480	A0	*8.90*	8.7	5 27 47.35	+5.9855	+ .0290	+ .0018	+65 34 9.95	+2.808	− .865	− .034	4	18.40
2302	δ Orionis	B0	2.48	2.73	27 55.115	3.0645	+ .0037	+ .0001	− 0 21 26.29	2.797	.444	− .003	76 64	19.47 19.29
2303	BD+24° 850	F8	*8.84*	8.94	28 10.721	3.6706	+ .0060	− .0077	+24 18 34.62	2.774	.531	− .082	5	17.44
2304	BD+38° 1205		*8.72*	8.92	28 13.391	4.1376	+ .0067	− .001	+38 49 11.63	2.770	.588	+ .04	5	19.90
2305	ε Columbæ	K0	3.92		28 22.256	2.1276	+ .0029	+ .0022	−35 31 41.95	2.757	.308	− .049	5	18.13
2306	BD+10° 807	F8	*9.00*	9.1	5 28 24.067	+3.3290	+ .0045	− .002	+10 57 22.81	+2.755	− .482	+ .02	5	18.40
2307	BD− 6° 1212	A0	8.6	8.37	28 24.956	2.9231	+ .0033	− .002	− 6 26 59.69	2.754	.423	+ .02	4	18.59
2308	CD−28° 2234	K0	8.1	7.4	28 31.208	2.3640	+ .0028	+ .0022	−28 9 47.57	2.745	.342	.000	4	19.30
2309	BD+15° 851	F8	*8.18*	8.01	28 32.862	3.4496	+ .0050	+ .0015	+15 53 25.25	2.742	.500	− .168	4	18.39
*2310	BD+27° 791	K0	*7.92*	8.10	28 54.113	3.7505	+ .0063	+ .0007	+27 6 31.11	2.711	542	− .003	4	18.87
2311	74 B Camelop.	K5	6.36	6.08	5 29 1.04	+8.0123	+ .0648	− .0009	+74 59 36.71	+2.702	−1.159	+ .019	9	19.55
2312	BD+ 5° 955	K0	9.0		29 1.270	3.2065	+ .0040	+ .001	+ 5 46 10.19	2.701	.464	+ .01	4	18.17
2313	BD+46° 1026	F5	8.5		29 5.650	4.4493	+ .0108	+ .003	+46 6 40.74	2.695	.644	− .03	4	18.61
2314	BD−16° 1168	K2	6.83	6.73	29 7.017	2.6836	+ .0029	+ .0015	−16 22 36.25	2.693	.388	+ .042	4	18.63
2315	α Leporis	F0	2.69	2.94	29 12.066	2.6455	+ .0029	+ .0001	−17 52 43.20	2.684	.383	+ .003	4	19.04
2316	Brad 770 *br.*	B9	6.03	6.61	5 29 30.21	+5.8010	+ .0250	+ .0020	+64 6 16.58	+2.659	− .837	− .068	4	18.32
2317	BD−18° 1120		8.4	8.5	29 43.408	2.6265	+ .0028	− .002	−18 37 1.27	2.640	.381	− .01	4	18.47
2318	Brad 793	A2	5.32	5.43	30 4.077	3.1587	+ .0038	− .0019	+ 3 42 47.89	2.611	.458	− .021	4	17.71
2319	CD−26° 2291		8.8		30 6.005	2.4033	+ .0027	.0000	−26 48 18.98	2.608	.349	.000	4	19.12
2320	BD+34° 1096	G0	*8.59*	8.73	30 15.028	4.0008	+ .0074	.000	+35 0 25.41	2.595	.580	− .01	4	18.21
2321	φ¹ Orionis	B0	4.53	4.82	5 30 25.632	+3.2930	+ .0041	− .0001	+ 9 26 11.45	+2.579	− .477	− .008	4	18.63
2322	BD−20° 1119	F5	8.6		30 29.550	2.5720	+ .0027	− .0020	−20 41 49.20	2.574	.373	+ .010	4	19.38
2323	BD− 8° 1167	F2	8.6	7.78	30 39.043	2.8803	+ .0031	− .001	− 8 15 36.29	2.566	.418	− .03	4	18.03
2324	BD+58° 845 *br.*	F5	*8.70*	8.50	30 40.807	5.2356	+ .0175	+ .005	+58 30 0.00	2.557	.758	− .05	4	18.55
2325	BD+42° 1342		9.05		30 48.328	4.2718	+ .0091	.000	+42 8 1.15	2.547	.619	+ .01	4	18.90
2326	BD− 0° 1005	B5	7.9	7.11	5 30 50.885	+3.0687	+ .0035	− .0014	− 0 10 31.53	+2.543	− .445	− .010	4	18.86
2327	CD−24° 3207	A0	10.1		30 59.161	2.4716	+ .0027	− .0013	−24 23 31.49	2.531	.359	+ .008	4 5	19.70 19.39
2328	BD−10° 1228	A5	*8.56*	8.65	31 3.974	2.8398	+ .0030	+ .0020	− 9 57 48.18	2.524	.412	− .028	4	17.83
2329	θ¹ Orionis *br.*	O5	5.36	5.52	31 20.637	2.9464	+ .0032	+ .0002	− 5 26 29.49	2.500	.427	+ .004	4	19.03
2330	θ² Orionis	B1	5.17	5.44	31 27.129	2.9458	+ .0032	+ .0009	− 5 28 3.47	2.490	.427	+ .015	4	20.21
2331	ι Orionis *br.*	O5	2.89	3.30	5 31 31.132	+2.9342	+ .0032	+ .0002	− 5 57 40.86	+2.485	− .425	− .004	4	18.70
2332	BD−22° 1161	F5	10.3	ft.	31 32.056	2.5168	+ .0027	+ .0055	−22 44 40.12	2.483	.365	− .048	4 5	19.22 18.80
2333	BD+20° 1014	A2	*9.44*	9.1	31 37.178	3.5687	+ .0051	.000	+20 30 20.50	2.476	.518	.00	4	18.03
2334	ε Orionis	B0	1.75	2.35	32 9.194	3.0437	+ .0034	.0000	− 1 15 7.10	2.430	.441	− .002	48 41	18.66 18.68
2335	BD+31° 1025	F5	*8.16*	8.53	32 11.090	3.8787	+ .0065	+ .0023	+31 17 0.41	2.427	.562	− .058	4	18.28
2336	BD−12° 1212	G0	9.0	8.9	5 32 20.807	+2.7813	+ .0029	− .0012	−12 23 23.10	+2.413	− .403	− .020	4	18.30
2337	W1 (1) 5^h 718	K0	6.10	6.06	32 37.538	3.3393	+ .0041	+ .0023	+10 59 11.85	2.389	.483	− .018	4	18.70
2338	Dorp (30) 611 *br.*	B3	5.62	5.90	32 41.156	2.9306	+ .0032	− .0003	− 6 6 50.27	2.383	.424	− .024	5	18.49
2339	BD+13° 958	G5	*5.39*		32 46.919	3.3921	+ .0043	− .001	+13 32 0.91	2.375	.492	− .03	5	18.32
2340	ζ Tauri	B3	3.00	3.50	32 51.712	3.5846	+ .0050	+ .0002	+21 5 41.04	2.368	.519	− .028	4	18.80

2316. 10^{m}9, 1″3, 47°.
2324. 12^m, 4″2, 131°.

2329. 6^{m}84, 13″, 311°, 7^{m}93, 17″, 345°, 6^{m}85, 13″, 61°.
2331. 7^{m}33, 11″, 142°.

2338. 10^m, 5″2, 288°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2341	BD+59° 900	A7	*9.50*		5 32 57.412	+5.2974	+0.0169	+0.003	+59 10 59.77	+2.360	−0.767	0.00	4	19.07
2342	BD+ 7° 951	A2	8.3	8.42	33 1.449	3.2503	+ .0038	− .001	+ 7 37 15.93	2.354	.471	− .02	4	17.88
2343	BD+51° 1096	A2	*8.65*	8.41	33 11.819	4.7287	+ .0117	− .001	+51 17 23.07	2.339	.686	− .02	4	18.26
2344	BD− 2° 1316	F5	9.1	8.54	33 21.350	3.0233	+ .0033	− .0004	− 2 7 51.47	2.325	.439	− .004	4	18.88
2345	BD+17° 967	M0	*8.92*	9.1	33 43.884	3.4842	+ .0045	+ .001	+17 13 16.05	2.293	.506	− .02	4	19.03
2346	BD+36° 1221		*9.33*	9.4	5 34 8.441	+4.0631	+. 0070	+ .002	+36 43 1.88	+2.257	− .590	+ .03	4	17.96
2347	BD− 4° 1198	A2	6.76	7.14	34 17.006	2.9763	+ .0031	− .0002	− 4 9 13.51	2.245	.432	− .039	4	18.21
2348	BD+41° 1246		9.7	9.2	34 32.153	4.2422	+ .0080	− .001	+41 21 54.86	2.223	.616	− .03	4	18.94
2349	BD−14° 1191	F0	8.0		34 37.436	2.7320	+ .0027	+ .0008	−14 23 10.81	2.215	.397	− .040	4	18.61
2350	BD+46° 1034		9.4	8.7	34 39.319	4.4630	+ .0094	− .001	+46 18 30.79	2.212	.647	− .02	4	18.53
2351	σ Orionis *m.*	B0	3.94	4.21	5 34 43.741	+3.0113	+ .0031	.0000	− 2 38 42.66	+2.206	− .438	+ .001	4	19.71
2352	BD+59° 903	F	8.86	8.79	34 51.91	5.3738	+ .0165	− .003	+60 0 15.91	2.194	.780	+ .03	4	19.30
2353	Lac 1918	K2	6.75	6.42	34 55.801	2.3884	+ .0026	− .0002	−27 15 22.66	2.188	.347	+ .004	4	19.45
2354	Wi (2) 5^h 957	F2	7.04	7.2	34 57.798	3.6692	+ .0050	− .0016	+24 10 50.40	2.185	.534	+ .014	4	18.21
2355	BD+73° 299		9.4		35 6.67	7.4854	+ .0430	− .0030	+73 14 43.36	2.173	1.086	− .057	4	18.77
2356	BD+ 3° 997	F8	*8.92*	9.3	5 35 14.846	+3.1510	+ .0034	− .0019	+ 3 22 22.95	+2.161	− .458	− .044	4	18.26
2357	BD+22° 979	G0	9.0	9.18	35 18.516	3.6304	+ .0049	− .002	+22 46 11.81	2.155	.527	− .04	4	18.75
2358	BD+28° 846	K0	7.16	7.52	35 31.025	3.8072	+ .0055	− .0011	+28 56 3.52	2.138	.553	− .006	4	18.80
2359	BD−16° 1194	K2	8.4	8.49	35 36.444	2.6884	+ .0027	.0000	−16 7 50.66	2.129	.391	− .059	4	18.46
2360	Lal 10726 *m.*	B9	6.22	6.69	35 44.704	2.6437	+ .0027	− .0004	−17 53 35.16	2.117	.383	− .001	4	18.90
2361	BD+10° 841	F0	8.12	8.02	5 35 46.653	+3.3121	+ .0037	− .003	+10 12 38.59	+2.115	− .481	− .04	4	18.50
2362	BD+19° 1009	A2	*8.95*	8.6	36 3.224	3.5325	+ .0044	.000	+19 5 3.68	2.091	.513	− .02	4	18.55
2363	Grmb 944	K0	6.41		36 9.33	18.770	+ .408	+ .016	+85 9 36.94	2.082	2.722	+ .004	222 193	19.76 19.75
2364	Brad 797	K0	6.19	6.18	36 14.380	5.0840	+ .0132	+ .0029	+56 32 29.06	2.074	.738	+ .028	4	18.80
2365	BD+ 1° 1093		*9.26*		36 14.650	3.1198	+ .0033	− .0006	+ 2 1 48.69	2.074	.453	+ .020	4	18.13
2366	ζ¹ Orionis *br.*	B0	2.05	2.62	5 36 43.280	+3.0267	+ .0031	+ .0005	− 1 59 2.02	+2.033	− .440	− .007	18	20.28
2367	α Columbæ	B5	2.75		36 45.087	2.1720	+ .0027	+ .0003	−34 6 57.71	2.030	.316	− .035	4	18.90
2368	BD+25° 920	G5	*9.01*	8.71	36 54.988	3.7212	+ .0050	.0000	+25 59 59.10	2.015	.540	+ .008	4	17.83
2369	BD+77° 211		*8.62*	8.6	36 55.40	9.3410	+ .0723	− .0060	+78 1 28.16	2.015	1.355	− .040	5	20.14
2370	BD+13° 954	A	*9.26*		36 58.249	3.3823	+ .0039	− .002	+13 6 29.29	2.011	.491	.00	4	18.38
2371	BD− 8° 1196		9.1		5 37 4.567	+2.8712	+ .0028	+ .002	− 8 37 9.63	+2.002	− .417	− .01	4	18.44
2372	BD+21° 937 *m.*	A0	8.8	8.78	37 17.804	3.5976	+ .0045	+ .0004	+21 32 27.38	1.982	.522	+ .001	4	18.21
2373	BD+38° 1261	K0	7.20	7.23	37 17.804	4.1176	+ .0066	− .0005	+38 9 34.06	1.982	.598	+ .008	4	17.96
2374	BD+54° 932	A0	6.80	7.43	37 21.549	4.9598	+ .0117	+ .0015	+54 49 39.86	1.977	.720	− .018	4	18.71
2375	BD+33° 1126	K0	9.0	8.60	37 33.337	3.9475	+ .0058	− .001	+33 20 9.31	1.960	.572	+ .01	4	17.82
2376	CD−28° 2361		9.8		5 37 38.258	+2.3562	+ .0025	− .0004	−28 18 50.79	+1.953	− .343	+ .016	4	19.51
2377	BD+47° 1189	K0	7.38	7.35	37 47.162	4.5332	+ .0087	.0000	+47 40 36.44	1.940	.658	− .017	5	18.04
2378	BD+65° 489	F8 -	*8.67*	8.8	38 2.15	6.0024	+ .0202	+ .0042	+65 34 47.89	1.918	.872	− .040	4	18.59
2379	BD− 0° 1059	K0	7.08	6.5	38 27.076	3.0715	+ .0031	− .0006	− 0 3 13.01	1.882	.447	− .008	4	17.77
2380	BD+43° 1338	G5	7.70	7.30	38 29.888	4.3362	+ .0074	+ .0007	+43 31 14.35	1.878	.630	− .028	4	17.95
2381	BD+67° 398		*8.75*		5 38 32.85	+6.3197	+ .0229	+ .0004	+67 43 4.28	+1.874	− .918	− .021	4	18.18
2382	BD+52° 993	G0	*8.45*	8.33	38 52.116	4.8140	+ .0100	+ .002	+52 36 46.70	1.846	.699	+ .05	4	18.36
2383	BD−21° 1239		9.4		39 6.338	2.5508	+ .0025	+ .0015	−21 24 49.79	1.825	.371	− .006	4	18.72
2384	Lac 1962	A0	6.22	6.14	39 8.620	2.2865	+ .0026	− .0003	−30 34 22.99	1.822	.333	+ .008	4	18.16
2385	BD−11° 1269	A0	8.6	7.8	39 17.475	2.7932	+ .0027	+ .0016	−11 51 41.04	1.809	.406	+ .025	4	18.22
2386	BD+ 3° 1018	F0	*8.18*	7.72	5. 39 28.920	+3.1650	+ .0031	− .0002	+ 3 58 6.85	+1.792	− .460	+ .005	4	18.07
2387	ο Aurigæ	A0	5.52	5.52	39 42.074	4.6475	+ .0086	− .0003	+49 47 34.44	1.773	.675	− .008	4	18.48
2388	BD+ 7° 993	K2	8.9	9.1	39 42.478	3.2454	+ .0033	− .001	+ 7 23 34.68	1.773	.472	.00	4	17.44
2389	BD+35° 1223	B9	8.12	8.30	39 44.516	4.0092	+ .0055	+ .001	+35 7 44.69	1.770	.582	.00	4	17.55
2390	BD+14° 1010	G5	8.3	8.76	40 10.964	3.4181	+ .0037	− .003	+14 32 32.48	1.731	.497	− .01	4	17.68
2391	BD+57° 911 *br.*	A0	*9.27*	9.3	5 40 38.725	+5.1849	+ .0116	+ .002	+57 46 17.96	+1.691	− .754	+ .01	4	18.78
2392	BD+42° 1392		8.8	8.80	40 49.712	4.2737	+ .0064	+ .002	+42 2 45.72	1.675	.621	− .16	4	18.26
2393	Lal 10922	G0	6.44	6.18	41 1.678	2.5837	+ .0025	− .0021	−20 9 39.22	1.658	.376	+ .024	4	18.57
2394	γ Leporis	F8	3.80	4.07	41 7.644	2.5218	+ .0025	− .0202	−22 28 24.48	1.649	.367	− .375	4	18.51
2395	BD+77° 215	G5	*9.00*		41 13.76	8.9076	+ .0518	+ .0042	+77 8 31.58	1.640	1.295	− .018	4	18.86
2396	BD− 1° 1019	G0	8.4	8.6	5 41 25.212	+3.0344	+ .0028	+ .0086	− 1 38 45.41	+1.623	− .442	− .061	4	17.72
2397	BD+18° 959	F2	*7.86*	8.5	41 26.079	3.5269	+ .0038	+ .001	+18 49 45.04	1.622	.513	− .02	4	17.71
2398	BD−10° 1272	A0	8.61		41 27.056	2.8377	+ .0027	+ .0015	−10 0 23.01	1.621	.413	− .038	4	18.40
2399	BD+ 5° 1010	K0	8.71	8.37	41 47.237	3.1909	+ .0031	− .0003	+ 5 4 11.52	1.591	.464	− .031	4	17.98
2400	BD+75° 237	K2	8.42	8.4	41 59.14	8.3551	+ .0419	+ .0027	+75 50 42.26	1.574	1.215	− .014	4	18.47

2351. $4^{m}1$–$5^{m}8$, 0″.3, 300°; $9^{m}28$, 11″, 236°; $6^{m}82$, 13″, 85°; $6^{m}67$, 42″, 62°.
2360. $6^{m}5$–$8^{m}0$, 0″.7, 144°.
2366. $4^{m}21$, 2″.5, 158°.
2372. $9^{m}4$–$9^{m}7$, 0″.4, 113°.
2391. 13^{m}, 4″.8, 155°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2401	Brad 830	B8	5.91	6.18	5 42 9.388	+3.4495	+0.0037	+0.0007	+15 47 32.30	+1.559	−0.502	−0.010	4	18.38
2402	Wi (2) 5ʰ 1262 ... *m.*	F8	7.21	7.42	42 18.336	3.8305	+ .0045	− .0016	+29 37 51.46	1.546	.557	− .118	4	18.15
2403	Mayer 233	G5	5.89	6.31	42 28.557	3.2955	+ .0032	− .0013	+ 9 29 38.55	1.531	.480	− .067	4	18.49
2404	BD+53° 950	B9	*8.40*	8.45	42 30.214	4.9076	+ .0090	+ .001	+54 0 17.38	1.529	.713	− .04	4	18.62
2405	130 Tauri	F0	5.51	5.61	42 46.241	3.4980	+ .0036	+ .0002	+17 42 1.05	1.506	.510	− .010	4	18.43
2406	BD+ 0° 1178	F0	8.64	8.61	5 42 47.432	+3.0945	+ .0029	− .0003	+ 0 56 17.97	+1.504	− .451	− .014	5	18.30
2407	BD+50° 1232	A5	8.42	8.42	42 52.533	4.6652	+ .0075	+ .001	+50 4 35.15	1.496	.678	− .05	4	18.03
2408	CD−23° 3073	Mb	7.03	6.8	42 54.755	2.4884	+ .0024	.0000	−23 40 28.90	1.493	.362	+ .027	4	19.01
2409	CD−25° 2654	K0	9.0		42 54.977	2.4254	+ .0025	.0000	−25 54 26.87	1.493	.353	− .006	4	19.00
2410	μ Columbæ	B2	5.20		43 1.494	2.2290	+ .0025	− .0001	−32 20 10.75	1.483	.325	− .026	4	19.13
2411	Brad 827	G0	6.90	7.16	5 43 17.890	+4.1717	+ .0055	− .0003	+39 30 25.70	+1.459	− .607	− .024	5	19.19
2412	ζ Leporis	A2	3.67	3.1	43 19.795	2.7193	+ .0025	− .0012	−14 51 3.08	1.457	.395	+ .002	4	18.89
2413	BD− 5° 1399	A	9.1	9.2	43 27.165	2.9440	+ .0026	+ .001	− 5 31 0.61	1.446	.428	+ .02	4	18.53
2414	BD−16° 1248	F5	9.1		43 43.658	2.6870	+ .0026	.0000	−16 8 13.32	1.422	.392	− .016	4	18.05
2415	BD+72° 291		*8.55*	8.7	43 45.75	7.2296	+ .0254	+ .0015	+72 13 13.38	1.419	1.052	.000	4	17.70
2416	BD− 7° 1172	G5	8.6	8.5	5 43 50.688	+2.8995	+ .0026	.000	− 7 24 17.30	+1.412	− .422	+ .03	4	17.98
2417	κ Orionis	B0	2.20	2.56	43 57.696	2.8449	+ .0026	+ .0002	− 9 41 49.65	1.402	.414	− .005	102 89	19.19 19.50
2418	BD+32° 1098	K0	*8.53*	8.72	44 30.967	3.9368	+ .0045	.000	+32 56 52.61	1.353	.573	+ .01	5	17.67
2419	Wi (1) 5ʰ 1048	G5	5.95	6.12	44 36.329	2.9768	+ .0027	+ .0026	− 4 6 55.67	1.345	.434	− .227	4	18.26
2420	BD+46° 1054	A0	8.6	8.45	45 0.825	4.4678	+ .0061	+ .002	+46 17 35.41	1.310	.650	− .02	4	18.29
2421	BD+ 8° 1078	A7	*9.54*		5 45 10.668	+3.2843	+ .0029	− .002	+ 9 0 54.92	+1.296	− .478	+ .01	4	17.79
2422	BD+26° 971	G0	*8.62*	8.96	45 13.438	3.7504	+ .0038	− .0058	+26 56 24.82	1.291	.546	− .106	4	18.29
2423	BD+11° 949	G5	8.5	8.3	45 29.902	3.3488	+ .0030	− .001	+11 41 41.76	1.267	.488	− .02	4	18.80
2424	BD+23° 1077	G5	*8.84*	8.93	45 39.674	3.6511	+ .0035	− .0110	+23 26 38.26	1.254	.532	− .252	4 3	18.65 19.60
2425	BD+16° 885	*	*9.19*	8.8	45 40.106	3.4690	+ .0032	− .001	+16 32 56.67	1.253	.505	− .02	4	18.21
2426	BD−20° 1193	K0	8.28	8.5	5 45 41.122	+2.5840	+ .0025	− .0024	−20 7 27.76	+1.251	− .377	+ .005	4	18.38
2427	BD+64° 551	A5	8.70	9.16	45 45.12	5.9306	+ .0128	+ .0011	+64 58 53.78	1.245	.863	− .026	4	19.31
2428	BD+56° 1073	G5	*8.32*	7.98	45 47.226	5.0542	+ .0081	− .003	+56 3 18.19	1.242	.736	− .03	4	18.82
2429	BD−17° 1253	K0	8.6	8.46	45 50.673	2.6495	+ .0024	− .0029	−17 36 19.41	1.238	.386	+ .071	4	18.77
2430	ν Aurigæ	K0	4.18	4.38	45 56.624	4.1577	+ .0048	− .0004	+39 7 35.09	1.229	.605	+ .006	4	18.37
2431	Paris 6859 ... *br.*	G5	5.65	5.40	5 45 58.384	+2.7276	+ .0025	− .0028	−14 30 22.95	+1.226	− .397	− .036	4	18.08
2432	BD+79° 188	F8	9.04	8.5	46 8.23	10.6475	+ .0605	− .0023	+80 0 45.99	1.212	1.550	+ .020	4	18.46
2433	BD+ 1° 1148	*	6.26	6.46	46 20.391	3.1193	+ .0027	− .0004	+ 2 0 8.43	1.194	.455	− .019	5 4	19.01 18.22
2434	BD+20° 1135 ... *br.*	K0	*8.16*	8.00	46 23.254	3.5614	+ .0033	− .001	+20 7 3.04	1.190	.518	− .01	5	17.93
2435	BD+53° 959	K5	*8.90*		46 30.868	4.8631	+ .0069	+ .001	+53 18 36.92	1.179	.709	+ .02	4	18.41
2436	CD−28° 2485		9.3		5 46 31.744	+2.3457	+ .0024	− .0006	−28 35 23.74	+1.178	− .342	.000	4	19.05
2437	BD+ 3° 1058	A0	*8.54*	8.80	47 14.928	3.1603	+ .0027	+ .0003	+ 3 45 13.07	1.115	.460	− .005	4 5	17.83 17.10
2438	BD+28° 924	A2	8.63	8.97	47 17.205	3.8006	+ .0036	+ .0008	+28 36 47.49	1.111	.553	− .017	4	18.04
2439	BD−11° 1304 ... *m.*	B9	7.07	7.30	47 37.806	2.7972	+ .0024	+ .0003	−11 40 0.26	1.081	.407	+ .005	5	17.77
2440	BD+44° 1306	A0	*8.74*	8.85	47 40.744	4.3729	+ .0049	.000	+44 15 19.46	1.077	.637	− .03	5	18.83
2441	δ Leporis	K0	3.90	4.23	5 47 52.815	+2.5636	+ .0024	+ .0171	−20 53 5.00	+1.059	− .373	− .653	4	18.68
2442	β Columbæ	K0	3.22		48 8.328	2.1103	+ .0025	+ .0039	−35 47 52.55	1.037	.308	+ .394	4	18.11
2443	ξ Aurigæ	A2	4.92	5.26	48 8.411	5.0284	+ .0069	− .0009	+55 41 24.36	1.037	.733	+ .012	4	18.96
2444	BD+30° 1041	F8	*8.27*	8.2	48 11.643	3.8568	+ .0036	+ .0015	+30 26 2.60	1.032	.561	− .130	4	17.89
2445	136 Tauri	A0	4.54	5.21	48 17.842	3.7703	+ .0034	+ .0009	+27 35 40.84	1.023	.549	− .018	5 4	19.66 18.63
2446	BD+37° 1350		*9.04*	8.8	5 48 18.923	+4.0962	+ .0040	+ .001	+37 29 7.03	+1.022	− .595	+ .01	5	18.48
2447	BD+63° 616	A5	7.85	7.56	48 29.75	5.7227	+ .0094	+ .001	+63 16 3.91	1.006	.834	− .06	4	18.04
2448	BD+62° 793		*9.82*		48 32.35	5.5934	+ .0089	.000	+62 5 58.77	1.002	.815	− .01	4	18.62
2449	CD−25° 2734	G5	6.87	6.78	48 52.020	2.4228	+ .0024	+ .0144	−25 57 45.94	.973	.353	+ .045	4	18.35
2450	BD−21° 1287	F5	8.4	8.2	48 52.024	2.5367	+ .0024	− .0027	−21 52 49.12	.973	.369	− .125	4	18.90
2451	BD+45° 1194	A0	*8.82*	8.70	5 48 54.523	+4.4229	+ .0046	− .001	+45 19 42.98	+ .970	− .644	− .02	4	17.79
2452	BD+14° 1067	A0	8.8	9.5	49 3.257	3.4158	+ .0028	− .001	+14 24 58.09	.957	.498	.00	4	18.50
2453	BD+21° 1030	A0	*8.79*	8.78	49 9.672	3.6072	+ .0031	− .002	+21 49 12.42	.948	.525	+ .02	4	18.40
2454	BD+ 6° 1061 ... *m.*	B9	8.3	8.42	49 32.787	3.2255	+ .0026	− .003	+ 6 31 51.58	.914	.470	+ .02	4	17.81
2455	BD+81° 200		*9.27*		49 49.11	11.9679	+ .0584	− .0009	+81 27 52.45	.899	1.743	− .012	4	18.28
2456	BD+ 8° 1107	B9	7.7	7.67	5 50 7.608	+3.2613	+ .0025	.000	+ 8 2 22.28	+ .863	− .475	− .01	4	18.34
2457	BD+41° 1304	F0	6.54	6.75	50 16.984	4.2461	+ .0038	− .0016	+41 18 37.82	.850	.619	− .024	4	17.81
2458	BD− 1° 1059	Ma	7.9	7.76	50 18.667	3.0473	+ .0024	− .0009	− 1 5 29.71	.847	.445	+ .010	4	18.93
2459	BD+35° 1283	K0	8.17	7.9	50 40.058	4.0131	+ .0033	.000	+35 9 25.89	.816	.585	− .04	4	18.45
2460	BD− 3° 1230	F5	8.4	8.29	50 41.353	2.9911	+ .0024	+ .0003	− 3 29 49.90	.814	.436	+ .033	4	19.14

2402. 7^{m}4, 8^{m}5, 1″4, 150°.
2425. A2, M0.

2431. 9^{m}, 2″5, 178°.
2433. G0, A0.

2434. 9^{m}2, 3″6, 12°.
2439. 7^{m}3-8^{m}9, 0″9, 277°.

2454. 9^{m}0-9^{m}0, 0″7, 324°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2461	α Orionis	Ma	Var.	0.84	5 50 50.403	+3.2460	+0.0025	+0.0019	+7 23 35.73	+0.801	−0.473	+0.008	95 69	18.73 18.60
2462	BD+69° 356		*9.50*		50 58.99	6.5884	+ .0110	− .0024	+69 12 9.19	.788	.960	− .020	5	18.50
2463	BD+59° 924	K0	*7.23*	7.01	51 0.824	5.3292	+ .0063	− .002	+59 23 2.25	.786	.777	− .06	4	19.23
2464	BD+20° 1172	G0	*9.31*	8.9	51 6.727	3.5615	+ .0027	.000	+20 6 10.12	.777	.519	− .01	4	18.89
2465	BD+82° 155	K0	*8.02*	8.02	51 13.62	13.1597	+ .0634	+ .0056	+82 27 31.29	.767	1.917	− .016	4	19.10
2466	BD+ 4° 1075	A0	*8.47*		5 51 24.109	+3.1833	+ .0024	− .0012	+ 4 44 2.60	+ .752	− .464	− .026	4	18.87
2467	BD− 4° 1288	A0	7.10	7.25	51 28.125	2.9597	+ .0023	− .0015	− 4 50 15.64	.746	.432	− .015	4	19.27
2468	BD−14° 1277		9.4		51 30.920	2.7399	+ .0023	+ .0020	−13 59 43.08	.742	.399	− .042	4	19.47
2469	BD+25° 1038	K5	*8.62*	9.15	51 34.512	3.6963	+ .0028	− .0023	+25 1 45.56	.737	.539	− .019	4	17.96
2470	CD−23° 3230	K0	9.2		51 35.998	2.4791	+ .0023	− .0036	−23 57 54.27	.734	.361	− .022	5	18.20
2471	BD+48° 1325		8.9	8.70	5 51 40.124	+4.5957	+ .0042	+ .006	+48 45 9.91	+ .728	− .670	− .08	4	19.18
2472	BD+61° 839 *m.*	G0	*8.77*	8.29	51 45.40	5.4936	+ .0063	− .001	+61 7 0.01	.721	.801	− .10	5	18.35
2473	BD+39° 1461		8.2	8.57	51 54.892	4.1917	+ .0033	− .001	+39 57 33.11	.707	.611	− .01	4	19.01
2474	BD+76° 220		*8.60*	8.85	52 1.78	8.8227	+ .0210	− .0091	+76 55 26.03	.697	1.286	− .034	4	19.77
2475	Lal 11224	G5	6.08	6.02	52 21.205	3.3447	+ .0025	+ .0067	+11 30 42.57	.669	.488	− .052	4	18.65
2476	BD−19° 1301	A3	9.1		5 52 25.730	+2.6084	+ .0023	− .0020	−19 10 17.00	+ .662	− .380	− .016	4	19.54
2477	BD−15° 1221	G5	8.4	7.98	52 33.358	2.7015	+ .0023	− .0001	−15 32 0.68	.651	.394	+ .021	4	19.11
2478	BD− 7° 1227	B9	9.1		52 43.185	2.8935	+ .0023	.000	− 7 38 29.87	.637	.422	+ .08	4	19.68
2479	η Leporis	F0	3.77	3.9	52 45.649	2.7352	+ .0023	− .0028	−14 10 52.92	.633	.398	+ .132	4	18.89
2480	δ Aurigæ	K0	3.88	4.05	52 56.357	4.9302	+ .0043	+ .0098	+54 16 48.60	.617	.719	− .126	4	18.74
2481	BD+55° 1036	A2	6.48	6.26	5 53 5.513	+5.0029	+ .0044	+ .0008	+55 18 57.48	+ .604	− .729	− .094	4	18.83
2482	σ Columbæ	F0	5.54		53 20.278	2.2576	+ .0024	+ .0005	−31 23 33.53	.583	.329	− .003	4	19.28
2483	β Aurigæ	A0	2.07	2.80	53 39.604	4.4058	+ .0032	− .0044	+44 56 27.17	.555	.642	− .005	4	18.31
2484	BD+51° 1138	K0	*8.50*	8.61	53 44.689	4.7481	+ .0036	.000	+51 25 59.33	.547	.692	.00	4	18.30
2485	Lal 11334	F5	6.92	6.92	54 2.360	2.6369	+ .0022	− .0006	−18 3 48.59	.521	.384	− .007	4	18.65
2486	Grmb 1030	K5	6.52	6.08	5 54 7.34	+8.2702	+ .0131	+ .0035	+75 35 7.70	+ .514	−1.206	− .021	9 8	18.58 18.40
2487	BD+67° 407	A0	*8.32*	8.51	54 13.87	6.2685	+ .0063	+ .0024	+67 18 50.38	.504	.914	− .046	4	18.00
2488	θ Aurigæ *br.*	A0	2.72	3.57	54 15.880	4.0870	+ .0027	+ .0045	+37 12 30.62	.502	.596	− .090	4	17.80
2489	CD−27° 2624	G5	8.2	8.3	54 18.797	2.3692	+ .0022	− .0010	−27 46 21.83	.497	.345	.000	4	19.48
2490	BD+14° 1100	K0	*9.26*	9.4	54 21.179	3.4309	+ .0023	.000	+15 0 14.36	.494	.500	− .04	4	18.47
2491	γ Columbæ	B3	4.36		5 54 42.054	+2.1271	+ .0024	− .0003	−35 17 27.43	+ .463	− .310	+ .002	5	19.83
2492	Brad 870	A0	5.25	5.40	54 42.727	3.0855	+ .0022	− .0008	+ 0 32 48.16	.462	.450	+ .001	5	18.09
2493	BD−11° 1345	A0	8.6	8.5	54 52.341	2.8118	+ .0022	− .0010	−11 3 0.20	.448	.410	.000	4	18.96
2494	Wi (2) 5^h 1660	A2	6.80	6.90	54 58.750	3.9447	+ .0025	− .0018	+33 7 56.66	.439	.575	.000	4	18.17
2495	BD−21° 1316	G5	7.8	7.22	55 11.160	2.5451	+ .0022	+ .0045	−21 33 3.23	.421	.371	+ .050	4	18.97
2496	Brad 874	A5	5.10	5.56	5 55 16.350	+2.8476	+ .0021	+ .0020	− 9 33 46.38	+ .413	− .415	− .053	4	18.37
2497	BD+ 2° 1102	F5	*7.79*	7.48	55 19.320	3.1304	+ .0021	+ .0005	+ 2 28 15.50	.409	.456	+ .013	4	18.41
2498	BD+10° 964	F8	*9.47*		55 30.338	3.3287	+ .0021	− .002	+10 50 48.27	.393	.485	.00	4	18.19
2499	BD− 1° 1083	B9	6.37	6.91	55 34.565	3.0389	+ .0021	− .0005	− 1 26 55.50	.387	.443	− .012	4	18.23
2500	BD+22° 1135	A2	6.92	7.38	55 37.166	3.6370	+ .0023	.000	+22 53 46.44	.383	.531	− .02	4	18.87
2501	BD+25° 1073	K7	9.4	8.78	5 56 6.064	+3.7212	+ .0022	+ .0019	+25 53 19.69	+ .341	− .543	+ .020	4	18.76
2502	BD+58° 887 *m.*	G5	*9.22*		56 11.041	5.2295	+ .0031	+ .001	+58 13 17.49	.334	.762	+ .10	4	18.45
2503	BD+56° 1086	G5	6.58	6.08	56 13.644	5.1317	+ .0030	+ .0015	+57 1 7.26	.330	.748	− .038	4	19.02
2504	BD+17° 1089	G5	*8.47*	7.94	56 14.944	3.5040	+ .0021	+ .001	+17 53 15.47	.328	.511	+ .01	4	18.96
2505	BD+72° 298	A0	*8.55*	8.60	56 16.13	7.2854	+ .0062	− .0037	+72 24 7.39	.326	1.062	− .022	4	18.27
2506	BD+71° 336	G0	*8.68*	8.7	5 56 25.87	+6.9595	+ .0055	− .0168	+71 1 41.26	+ .312	−1.014	− .038	4	19.30
2507	BD+ 5° 1066	F2	8.1	8.20	56 26.884	3.2084	+ .0021	− .002	+ 5 48 0.92	.310	.468	− .02	5	17.84
2508	BD+31° 1168	G5	8.0	8.2	56 39.416	3.8860	+ .0021	+ .0008	+31 19 33.12	.292	.567	− .023	4	18.60
2509	Brad 871	B8	6.28	6.4	56 51.731	3.6235	+ .0020	− .0008	+22 23 59.96	.275	.529	− .025	4	17.58
2510	BD+ 7° 1093	K2	8.9	8.6	57 0.997	3.2570	+ .0020	− .002	+ 7 51 10.29	.261	.475	+ .01	4	18.04
2511	BD+47° 1237	K0	7.30	7.0	5 57 3.538	+4.5562	+ .0022	− .0011	+47 59 23.91	+ .257	− .664	− .079	4	18.28
2512	CD−23° 3338	K0	9.3		57 25.048	2.4799	+ .0022	− .0013	−23 55 29.21	.226	.360	− .005	4	18.54
2513	Brad 868	G5	6.13	6.20	57 31.842	4.3151	+ .0020	+ .0113	+42 54 55.95	.216	.629	− .141	6	19.42
2514	BD−13° 1321	K0	8.2	7.47	57 39.206	2.7635	+ .0021	+ .0010	−13 1 40.62	.205	.403	− .017	4	18.70
2515	BD− 3° 1265	A2	8.0	7.89	57 52.226	2.9867	+ .0020	− .0005	− 3 40 52.89	.186	.435	− .007	4	18.46
2516	Lac 2096	A0	5.90	6.27	5 57 58.106	+2.4377	+ .0022	− .0001	−25 25 6.09	+ .178	− .355	− .021	4	19.14
2517	μ Orionis *m.*	A2	4.19	4.3	57 58.895	3.2999	+ .0020	+ .0012	+ 9 38 54.58	.177	.481	− .029	4	17.84
2518	Brad 864	A5	6.30	6.08	58 8.419	4.7573	+ .0019	+ .0015	+51 34 37.10	.163	.694	− .044	4	18.48
2519	BD+12° 995	*	*9.20*	8.79	58 19.900	3.3623	+ .0019	− .003	+12 13 42.92	.146	.490	− .01	4	18.18
2520	BD+36° 1343	F5	*9.18*	8.7	58 23.000	4.0587	+ .0018	− .002	+36 25 14.88	.141	.591	− .01	4	18.91

2461. 0^{m}2 to 1^{m}2.
2472. 9^{m}1–10^{m}0, 0$''$6, 270°.

2488. 7^{m}5, 2$''$8, 334°.
2502. 9^{m}9–10^{m}0, 0$''$3, 10°.

2517. 4^{m}3–6^{m}6, 0$''$3, 25°; 17.5 yrs.
2519. K7, K0.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2521	BD+64° 564	F5	*7.69*	7.71	5 58 25.86	+5.8231	+0.0020	+0.0027	+64 5 10.75	+0.137	−0.849	+0.053	4	18.80
2522	BD− 5° 1480	K5	8.65	8.65	58 53.918	2.9545	+ .0020	− .0004	− 5 3 22.11	.095	.431	+ .004	4	17.86
2523	BD+28° 997	K2	*8.15*	8.22	59 12.773	3.7924	+ .0017	+ .0016	+28 18 15.79	.069	.553	+ .001	4	18.06
2524	1 Geminorum	G5	4.30	4.20	59 15.380	3.6474	+ .0017	− .0006	+23 16 8.45	.065	.532	− .108	4	18.39
2525	BD− 7° 1262	K2	9.1	9.3	59 22.018	2.9077	+ .0019	+ .003	− 7 2 24.04	.055	.424	+ .02	4	18.09
2526	BD−17° 1339	G0	8.6	8.9	5 59 32.606	+2.6437	+ .0021	+ .0005	−17 47 56.04	+ .040	− .385	− .010	4 5	18.37 17.72
2527	BD+37° 1405	F8	6.40	6.42	59 33.223	4.1156	+ .0015	− .002	+37 58 7.85	+ .039	.600	− .03	4	18.19
2528	BD+32° 1179	A0	*9.61*		5 59 49.421	3.9295	+ .0015	+ .001	+32 39 53.12	+ .015	.573	− .07	4	18.99
2529	BD+60° 928		*9.28*		6 0 1.39	5.4333	+ .0009	+ .001	+60 29 9.79	− .002	.792	.00	4	18.49
2530	BD+83° 158		*9.12*		0 7.40	14.4632	− .0041	− .0138	+83 18 31.86	− .011	2.108	+ .015	4	18.47
2531	BD+ 3° 1118	F0	*9.35*		6 0 8.262	+3.1556	+ .0018	− .0011	+ 3 33 0.66	− .012	− .460	− .001	4	18.50
2532	BD+16° 988	A0	8.7		0 12.281	3.4646	+ .0017	− .001	+16 20 37.56	.018	.505	− .02	4	17.79
2533	66 Orionis	K0	5.70	5.72	0 44.682	3.1700	+ .0018	− .0002	+ 4 9 51.50	.065	.463	− .012	4	19.21
2534	BD+74° 275	F8	*8.62*	8.60	0 53.58	7.9044	− .0020	+ .0024	+74 32 24.75	.078	1.152	+ .001	4	18.31
2535	BD+48° 1345		8.9		1 13.596	4.5829	+ .0008	+ .004	+48 29 46.86	.108	.668	− .05	4	17.63
2536	BD−19° 1345	B9	8.3	8.0	6 1 21.054	+2.5999	+ .0021	+ .0041	−19 29 3.32	− .118	− .379	+ .041	4	18.07
2537	BD− 9° 1321	G0	8.1	8.20	1 22.506	2.8543	+ .0019	− .002	− 9 17 3.15	.120	.416	− .02	5	18.10
2538	BD+54° 989	K0	*9.03*		1 38.102	4.9456	+ .0004	+ .005	+54 29 36.30	.143	.721	+ .03	4	18.54
2539	BD+23° 1192	K0	6.89	7.10	1 55.976	3.6578	+ .0014	− .002	+23 38 49.60	.169	.533	− .01	5 4	18.82 18.50
2540	BD+20° 1260	A5	8.8	8.7	1 57.552	3.5787	+ .0014	− .001	+20 44 19.16	.171	.522	+ .01	4	19.06
2541	CD−27° 2731	G5	8.3		6 2 19.450	+2.3864	+ .0021	− .0012	−27 11 6.99	− .203	− .348	− .028	4	19.39
2542	Lal 11544	B9	7.01	7.36	2 20.434	3.7445	+ .0012	− .0009	+26 41 29.98	.205	.546	.000	4	18.50
2543	BD−10° 1374	F5	8.5	8.4	2 26.652	2.8159	+ .0019	+ .0006	−10 52 41.44	.214	.410	− .044	4	18.30
2544	BD+50° 1272	F8	*9.54*		2 29.808	4.7209	+ .0002	+ .001	+50 58 5.70	.219	.688	− .01	4	19.41
2545	θ Leporis	A0	4.67	4.98	2 32.044	2.7165	+ .0019	− .0005	−14 55 37.79	.222	.395	+ .023	4	19.35
2546	BD+68° 426	A2	*8.88*		6 2 51.72	+6.3906	− .0026	.0000	+68 3 50.97	− .250	− .931	− .011	4	19.22
2547	BD+ 0° 1285	K2	7.43	7.0	2 53.320	3.0747	+ .0017	+ .0002	+ 0 5 11.34	.253	.448	+ .011	4	18.24
2548	Lal 11630	B5	6.75	6.99	2 56.658	2.9951	+ .0018	− .0013	− 3 19 53.77	.258	.437	− .012	4	19.01
2549	ν Orionis	B2	4.40	4.50	3 0.203	3.4252	+ .0014	+ .0006	+14 46 45.28	.263	.499	− .036	82 62	19.53 19.50
2550	BD+43° 1462		9.2	9.3	3 19.508	4.3514	+ .0004	+ .001	+43 44 26.58	.291	.634	− .03	4 5	18.79 18.07
2551	BD+25° 1128	K0	*8.27*	8.00	6 3 30.379	+3.7238	+ .0011	− .0009	+25 58 42.87	− .307	− .543	+ .004	4	18.33
2552	BD− 0° 1180		8.9		3 30.534	3.0495	+ .0017	− .0002	− 0 59 40.62	.307	.445	− .025	4	19.37
2553	CD−29° 2774	A2	9.2	7.9	3 31.319	2.3136	+ .0021	+ .0010	−29 36 14.74	.308	.337	− .020	5	18.99
2554	Rad (90) 1512	Mb	6.12	5.97	3 34.434	2.5382	+ .0020	− .0007	−21 48 7.57	.313	.370	− .019	4	19.31
2555	BD+36° 1369		*9.36*		3 54.176	4.0754	+ .0006	− .0016	+36 53 8.16	.341	.594	− .070	4	18.47
2556	BD+31° 1207	A2	7.46	7.82	6 3 55.868	+3.8844	+ .0008	+ .0002	+31 16 40.71	− .344	− .566	− .013	4	18.81
2557	BD+79° 196	A0	*8.08*	8.09	4 1.13	10.1783	− .0170	− .0040	+79 21 3.50	.352	1.483	+ .004	4	18.94
2558	BD+ 1° 1227 *m*	G5	*8.85*	8.8	4 14.240	3.1099	+ .0016	− .0021	+ 1 35 47.47	.371	.453	− .018	4	18.87
2559	BD+12° 1035	K2	8.9	8.64	4 26.186	3.3684	+ .0014	− .002	+12 28 48.66	.388	.491	.00	4	18.14
2560	BD+51° 1159	K2	*9.20*	9.10	4 31.296	4.7386	− .0006	− .001	+51 16 11.90	.395	.690	− .01	4 5	18.55 17.87
2561	36 Camelop	K0	5.39	5.46	6 4 48.24	+6.0366	− .0037	+ .0019	+65 44 10.91	− .420	− .880	− .027	4	18.24
2562	BD+19° 1236	K0	*9.64*		4 59.192	3.5356	+ .0011	− .003	+19 6 39.87	.436	.515	− .20	4 5	18.45 18.12
2563	Brad 886 *s*	A0	6.09	6.18	5 28.854	4.5949	− .0006	+ .0022	+48 43 48.66	.479	.670	− .062	4	18.39
2564	CD−23° 3482	A0	9.7		5 33.052	2.4948	+ .0020	− .0026	−23 23 42.75	.486	.363	− .012	4	19.22
2565	BD−13° 1366	F0	7.9	7.44	5 34.425	2.7592	+ .0018	− .0017	−13 12 22.99	.487	.402	− .010	5	17.78
2566	BD+ 5° 1120	K0	8.2	8.47	6 5 40.398	+3.2067	+ .0014	.000	+ 5 43 30.11	− .496	− .467	− .04	4	18.72
2567	BD−15° 1285	A0	8.71		5 50.715	2.7123	+ .0019	+ .0006	−15 5 58.86	.511	.395	+ .063	4 5	18.77 18.05
2568	BD+28° 1036	B8	7.63	7.88	6 10.046	3.8109	+ .0006	+ .0005	+28 55 28.68	.539	.555	+ .008	4	18.16
2569	BD+45° 1250	K0	8.57	8.02	6 24.077	4.4116	− .0006	+ .0011	+45 3 57.98	.560	.642	− .035	4	18.87
2570	BD+15° 1097	G5	8.1	7.58	6 37.495	3.4451	+ .0010	+ .001	+15 34 47.01	.579	.502	+ .01	5	18.49
2571	BD+34° 1287	K5	*9.29*	9.5	6 6 41.595	+3.9982	.0000	+ .003	+34 43 2.74	− .585	− .583	+ .03	4	18.46
2572	BD+ 3° 1150	A0	8.9	9.1	6 48.204	3.1570	+ .0014	− .0026	+ 3 36 45.66	.595	.460	+ .016	4	17.91
2573	CD−25° 2981	A3	9.5		6 49.208	2.4420	+ .0020	− .0010	−25 16 32.51	.596	.355	.000	4	19.34
2574	BD+38° 1407		*9.62*		6 49.875	4.1467	− .0002	+ .001	+38 48 6.48	.597	.604	− .01	5	18.29
2575	BD+59° 952	K7	*8.58*	8.79	6 56.245	5.3182	− .0033	− .0018	+59 15 16.90	.607	.774	− .025	4	18.76
2576	BD+52° 1045	A0	8.95	8.9	6 7 13.840	+4.7830	− .0018	.000	+52 0 46.14	− .632	− .696	− .02	4	18.88
2577	Brad 900	B9	5.70	[illegible]	7 16.992	3.5538	+ .0008	+ .0004	+19 48 34.21	.637	.517	− .014	4	17.63
2578	ξ Orionis	B3	4.35	5.14	7 23.438	3.4114	+ .0011	+ .0006	+14 13 40.82	.646	.498	− .034	4	18.92
2579	BD+66° 435	F5	8.0	[illegible]	7 28.47	6.0967	− .0064	+ .0041	+66 10 14.78	.653	.888	+ .006	4	18.82
2580	BD− 4° 1391	F0	9.20	9.3	7 30.165	2.9565	+ .0016	+ .0002	− 4 58 23.05	.656	.430	− .013	5	17.89

2558. $9^{m}4$-$9^{m}6$, $0''.8$, 258°.

2563. $6^{m}82$, $7''.6$, 355°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2581	BD+10° 1044	B5	7.43	7.44	6 7 50.556	+3.3167	+0.0011	−0.005	+10 21 10.99	−0.686	−0.483	−0.02	4	17.55
2582	BD−16° 1389		9.9		7 59.447	2.6825	+ .0018	− .0002	−16 17 19.31	.699	.390	+ .065	5	17.99
2583	BD+33° 1275	A0	8.7	8.7	8 3.720	3.9460	.0000	.000	+33 10 55.09	.705	.575	.00	4	17.75
2584	BD+41° 1394	A0	*8.49*	8.37	8 15.383	4.2538	− .0008	− .0024	+41 29 22.06	.722	.620	− .010	4	17.80
2585	BD+13° 1164	G5	*9.28*		8 23.338	3.3851	+ .0010	− .003	+13 9 54.46	.734	.493	+ .01	4	17.66
2586	BD− 6° 1450	K0	9.7		6 8 42.962	+2.9154	+ .0016	.000	− 6 43 0.95	− .762	− .424	− .04	4	18.36
2587	BD+24° 1165	K0	*8.46*	8.33	8 45.629	3.6868	+ .0004	+ .0018	+24 41 49.16	.766	.537	− .011	4	17.62
2588	BD+17° 1181	F8	8.3	8.8	9 32.066	3.4841	+ .0006	.000	+17 7 25.59	.834	.507	− .04	4	17.89
2589	BD+45° 1270	A0	8.0	8.70	9 40.248	4.4378	− .0017	.000	+45 38 7.41	.846	.646	− .04	4	17.88
2590	BD−18° 1340		9.3		9 40.934	2.6173	+ .0019	+ .0030	−18 49 57.15	.846	.381	+ .022	4	18.69
2591	22 H Camelop.	A0	4.73	5.31	6 10 2.04	+6.6152	− .0117	+ .0022	+69 21 0.82	− .877	− .963	− .109	14	19.14
2592	BD+42° 1513		9.2	8.83	10 2.531	4.2953	− .0014	+ .003	+42 29 2.29	.878	.626	− .09	[illegible]	17.86
2593	η Geminorum *br.*	Ma	Var.	3.90	10 2.879	3.6265	+ .0003	− .0045	+22 31 52.33	.879	.527	− .017	[illegible]	18.13
2594	BD−21° 1391	A0	8.1	8.26	10 3.879	2.5537	+ .0018	+ .0012	−21 14 39.30	.880	.371	− .038	4	18.31
2595	Brad 904 *n. f.*	F0	6.93	6.50	10 15.545	4.0488	− .0007	− .0025	+36 10 25.71	.897	.590	− .017	4	18.31
2596	CD−23° 3575	A0	8.7	8.5	6 10 21.757	+2.4971	+ .0018	− .0034	−23 19 33.79	− .906	− .363	− .012	[illegible]	17.98
2597	Brad 893	Ma	5.30	4.94	10 32.31	5.5356	− .0063	+ .0006	+61 32 34.43	.921	.806	− .003	4	18.40
2598	5 Monocerotis	K0	4.09	3.8	10 57.192	2.9265	+ .0015	− .0003	− 6 14 57.25	.958	.425	− .021	[illegible]	17.79
2599	BD− 8° 1364	F5	7.7	8.08	11 14.708	2.8708	+ .0015	− .005	− 8 36 6.14	.983	.417	+ .06	[illegible]	18.15
2600	CD−29° 2896		9.3	ft.	11 19.370	2.3281	+ .0020	− .0005	−29 9 25.89	.990	.338	− .002	[illegible]	18.24
2601	BD− 0° 1234	F5	5.68	5.73	6 11 30.172	+3.0615	+ .0012	− .0106	− 0 28 51.53	−1.006	− .445	− .217	4	17.72
2602	Lal 11947	F5	6.34	7.1	11 45.932	3.1006	+ .0011	− .0022	+ 1 11 42.86	1.029	.451	+ .018	4	17.59
2603	*k* Orionis	F5	5.11	5.49	11 57.062	3.3635	+ .0007	+ .0060	+12 17 43.82	1.045	.489	+ .193	4	19.31
2604	BD+ 5° 1156	B9	7.06	7.25	11 58.456	3.1928	+ .0010	− .0009	+ 5 8 29.83	1.047	.464	− .006	4	17.93
2605	BD−10° 1443 *m.*	B9	8.4	8.39	12 0.086	2.8179	+ .0015	.0000	−10 48 31.16	1.049	.410	− .004	[illegible]	17.91
2606	CD−27° 2835		10.4	ft.	6 12 0.477	+2.3783	+ .0019	− .0022	−27 29 27.78	−1.050	− .346	− .074	5	18.27
2607	Brad 917	B2	6.26	6.36	12 5.843	3.6604	.0000	+ .0009	+23 46 9.22	1.058	.532	− .004	[illegible]	18.13
2608	BD+27° 1045	A2	*9.27*		12 24.071	3.7556	− .0004	− .0011	+27 6 3.00	1.084	.546	+ .002	4	17.64
2609	BD+18° 1159	K0	*8.28*	8.03	12 32.086	3.5247	+ .0002	.000	+18 42 44.11	1.096	.513	.00	[illegible]	17.66
2610	2 Lyncis	A0	4.42	4.94	12 33.933	5.2971	− .0064	− .0007	+59 2 29.55	1.099	.771	+ .021	[illegible]	17.61
2611	BD+48° 1369		9.7	8.27	6 12 35.068	+4.5537	− .0030	− .003	+47 58 58.21	−1.100	− .663	+ .02	4	17.58
2612	BD+ 9° 1173	A2	5.29	5.60	12 41.972	3.3073	+ .0007	− .001	+ 9 58 21.74	1.110	.481	− .07	5 6	18.24 17.72
2613	BD+ 7° 1221	G5	8.9	9.2	13 0.729	3.2477	+ .0008	− .004	+ 7 28 22.13	1.137	.472	.00	4	17.82
2614	BD− 3° 1373	K0	9.3	8.7	13 25.350	3.0023	+ .0012	− .0028	− 3 1 11.87	1.173	.437	− .037	4	18.26
2615	BD+68° 439	G5	*8.85*	9.2	13 31.92	6.5300	− .0153	+ .0017	+68 54 5.00	1.183	.950	− .105	4	17.83
2616	W1 (1) 6^h 272 *br.*	A0	5.98	6.51	6 13 32.366	+3.4156	+ .0003	− .0014	+14 24 48.49	−1.184	− .497	− .013	[illegible]	17.80
2617	BD+35° 1380	K0	6.60	6.58	13 32.641	4.0151	− .0013	− .001	+35 14 25.30	1.184	.584	− .03	[illegible]	17.67
2618	κ Columbæ	K0	4.51		13 42.274	2.1348	+ .0020	− .0007	−35 6 47.35	1.198	.310	+ .075	[illegible]	18.87
2619	BD+29° 1172	G5	*8.67*	9.20	14 6.770	3.8414	− .0009	+ .0016	+29 57 29.09	1.234	.558	− .009	[illegible]	18.12
2620	Lal 12060	K0	5.28	5.39	14 8.134	2.6704	+ .0016	− .0009	−16 47 6.43	1.236	.388	− .009	4	18.09
2621	BD+46° 1129	G5	*8.03*	8.06	6 14 10.662	+4.4871	− .0032	+ .002	+46 40 49.00	−1.239	− .652	− .01	5 4	18.67 18.57
2622	BD+40° 1561	A0	8.8	9.5	14 24.814	4.2090	− .0022	+ .002	+40 25 50.91	1.260	.612	− .03	[illegible]	17.86
2623	BD−12° 1436	F5	9.3		14 30.918	2.7774	+ .0014	.0000	−12 29 12.75	1.269	.403	+ .015	4	18.66
2624	BD+83° 164	F0	*8.96*	9.2	14 46.40	15.3730	− .1635	+ .0031	+83 48 45.21	1.292	2.236	− .033	4	18.81
2625	BD−14° 1396	A0	8.1	8.2	14 51.607	2.7262	+ .0015	− .0010	−14 33 57.43	1.299	.395	− .004	4	[illegible]
2626	BD+56° 1112	G0	*8.85*	8.7	6 14 51.736	+5.0662	− .0064	− .006	+56 13 16.25	−1.299	− .737	− .07	4	18.27
2627	BD+57° 958	K5	*9.58*	9.4	15 6.434	5.1740	− .0072	− .002	+57 36 8.07	1.320	.752	+ .01	4	18.01
2628	BD+28° 1081	K0	*8.62*	9.3	15 27.784	3.8033	− .0010	+ .0002	+28 43 23.09	1.351	.553	− .002	4	18.23
2629	CD−24° 3906	B9	7.06	6.7	15 39.420	2.4516	+ .0018	− .0010	−24 58 45.75	1.368	.356	+ .006	4	17.97
2630	BD− 4° 1457	A0	8.9	9.3	15 48.601	2.9684	+ .0011	− .0004	− 4 28 30.99	1.382	.431	.000	4	[illegible]
2631	7 Monocerotis	B3	5.13	5.50	6 15 51.557	+2.8904	+ .0013	− .0005	− 7 47 18.46	−1.386	− .420	− .002	5	19.23
2632	BD+33° 1303	K2	9.8	9.2	15 52.178	3.9496	− .0016	+ .001	+33 20 9.48	1.387	.574	− .02	[illegible]	18.23
2633	CD−27° 2880	B9	8.3	7.6	16 0.874	2.3892	+ .0018	+ .0008	−27 8 50.49	1.400	.347	.000	[illegible]	18.58
2634	BD+66° 441	F0	*8.10*	8.22	16 16.05	6.1463	− .0150	− .0125	+66 33 17.77	1.422	.893	− .120	4	18.42
2635	BD+22° 1291	B9	*8.83*	8.2	16 18.592	3.6167	− .0005	− .001	+22 12 8.30	1.425	.527	+ .02	4	19.07
2636	BD+16° 1103	B5	*9.52*		6 16 19.746	+3.4794	− .0001	− .001	+16 58 0.44	−1.427	− .506	+ .02	[illegible]	18.78
2637	BD+19° 1313	G5	7.30	7.11	16 51.188	3.5559	− .0004	− .001	+19 55 45.95	1.473	.517	− .01	[illegible]	18.51
2638	Grmb 1004	G5	6.57	7.00	16 55.80	26.567	− .641	+ .025	+86 45 12.33	1.479	3.861	− .098	9	18.23
2639	W1 (2) 6^h 340	A0	7.06	7.14	16 56.496	3.8422	− .0013	+ .0007	+30 0 8.17	1.480	.558	− .022	[illegible]	17.82
2640	BD+49° 1485		8.9	8.8	17 2.203	4.6179	− .0050	.000	+49 13 31.23	1.489	.671	+ .02	4	19.23

2593. 3^m3 to 4^m2, 9^m, 1″0, 279°.

2595. 7^m48, 11″, 217°.

2605. 9^m1–9^m3, 0″4, 327°.

2616. 12^m5, 2″2, 341°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2641	BD− 6° 1507	B9	8.1	7.82	6 17 4.902	+2.9172	+0.0012	0.000	− 6 39 17.49	−1.493	−0.423	+0.02	4	18.14
2642	ζ Can Maj	B3	3.10	3.40	17 14.494	2.3025	+ .0019	+ .0006	−30 1 37.79	1.506	.334	+ .001	4	18.96
2643	BD+77° 239	F8	*8.54*	8.08	17 18.17	8.8640	− .0483	− .0018	+77 2 32.02	1.512	1.288	− .012	4	18.83
2644	BD+53° 1013	K5	*7.92*	7.92	17 26.957	4.8582	− .0064	+ .001	+53 16 6.55	1.525	.706	− .01	4 5	19.47 18.61
2645	BD+63° 644		*9.15*	8.89	17 30.03	5.7293	− .0127	− .006	+63 21 53.12	1.529	.832	− .02	4	18.81
2646	BD+ 2° 1200	K0	7.36	7.80	6 17 36.790	+3.1281	+ .0008	− .0003	+ 2 22 51.29	−1.539	− .454	− .014	4	19.07
2647	BD+12° 1122 br.	A0	8.5	8.21	17 43.336	3.3578	+ .0002	− .003	+12 4 39.59	1.549	.488	− .01	4	18.88
2648	BD+14° 1260	G5	8.44	8.39	17 44.903	3.4273	− .0001	− .002	+14 54 17.51	1.551	.498	− .06	4	18.14
2649	Lac 2232	F0	7.40	7.17	17 50.920	2.3149	+ .0019	+ .0033	−29 37 53.05	1.560	.336	− .072	4	19.83
2650	μ Geminorum	Ma	3.19	3.15	18 7.221	3.6260	− .0008	+ .0044	+22 33 21.41	1.584	.527	− .113	93 76	18.73 18.88
2651	BD+10° 1111	A	8.62	8.51	6 18 12.627	+3.3109	+ .0002	− .005	+10 8 20.84	−1.591	− .483	− .01	4	19.09
2652	BD−18° 1394		9.3	8.9	18 24.108	2.6144	+ .0016	− .0020	−18 59 19.37	1.608	.379	+ .042	4	18.49
2653	BD+39° 1612	G5	8.2	8.08	18 33.264	4.1521	− .0030	.000	+39 9 5.59	1.621	.603	+ .01	4	18.31
2654	ψ^1 Aurigæ	K2	5.10	5.45	18 44.217	4.6228	− .0056	+ .0013	+49 19 49.40	1.637	.671	− .005	4	19.05
2655	BD− 0° 1273	B9	7.7	7.94	18 45.278	3.0543	+ .0008	− .0014	− 0 47 33.30	1.639	.443	− .009	4	18.59
2656	Rad (45) 1707 br.	A2	6.01	6.12	6 19 7.40	+6.8503	− .0252	.0000	+70 34 51.56	−1.671	− .994	+ .011	12	19.52
2657	BD+60° 962	K2	9.21	9.3	19 9.30	5.3890	− .0111	− .002	+60 6 21.78	1.673	.782	− .03	5	19.45
2658	β Can Maj	B1	1.99	2.75	19 10.598	2.6422	+ .0015	− .0005	−17 54 55.27	1.676	.383	.000	15	22.34
2659	δ Columbæ	G5	3.98		19 11.356	2.1948	+ .0018	− .0030	−33 23 43.08	1.676	.318	− .053	4	19.16
2660	BD+34° 1336	A0	*8.67*	8.48	19 18.034	3.9857	− .0023	+ .001	+34 26 9.17	1.686	.578	.00	5 4	19.06 19.56
2661	8 Monocerotis br.	A5	4.48	5.26	6 19 31.717	+3.1806	+ .0004	− .0008	+ 4 38 4.57	−1.706	− .461	− .003	4	17.96
2662	Wi (1) 6^{h} 466	A0	6.11	6.5	19 39.770	3.2819	+ .0002	− .0013	+ 8 55 39.23	1.718	.476	− .027	4	18.52
2663	BD−14° 1423	A3	6.89	7.3	19 40.538	2.7211	+ .0014	.0000	−14 47 35.70	1.719	.395	− .002	4	18.13
2664	BD+58° 927	K2	5.48	5.60	19 49.927	5.2420	− .0103	+ .0004	+58 27 45.86	1.732	.761	− .011	4 5	19.06 18.28
2665	BD+ 1° 1324		*9.33*		20 0.628	3.1011	+ .0007	− .0035	+ 1 13 22.36	1.748	.450	+ .014	4	18.98
2666	BD−20° 1373	K0	8.3	7.99	6 20 5.824	+2.5644	+ .0016	− .0018	−20 53 59.57	−1.756	− .371	− .010	4	18.88
2667	BD−10° 1504	K0	8.7	8.7	20 12.432	2.8223	+ .0013	− .0031	−10 39 20.53	1.765	.409	− .025	5	18.58
2668	Pulk (55) 1045	K0	5.39	5.17	20 26.416	2.8023	+ .0013	− .0035	−11 29 9.80	1.786	.406	− .047	4	18.44
2669	BD+17° 1235	B9	6.82	7.41	20 27.302	3.4806	− .0005	− .001	+17 2 20.22	1.787	.505	− .01	4	18.33
2670	BD+43° 1538	A0	*9.40*		20 39.173	4.3557	− .0046	− .001	+43 57 6.79	1.804	.632	− .03	4	19.42
2671	Grmb 1156	G5	7.14	6.98	6 20 40.064	+4.2712	− .0041	− .0010	+42 0 18.58	−1.805	− .620	− .012	4	18.89
2672	BD+14° 1285	A0	*9.00*	8.86	21 0.670	3.4064	− .0003	− .004	+14 4 33.13	1.835	.494	+ .01	4	18.06
2673	BD+ 5° 1234	A5	*9.49*	8.5	21 33.700	3.2110	+ .0003	+ .002	+ 5 55 59.03	1.883	.466	− .01	4	18.57
2674	BD+20° 1418	A3	8.95	8.9	21 40.186	3.5596	− .0009	.000	+20 6 7.22	1.892	.516	− .01	4	18.39
2675	BD+62° 845		*9.50*		21 40.24	5.6748	− .0153	− .003	+62 55 18.05	1.892	.823	− .01	4	18.43
2676	BD−22° 1404	K2	9.1		6 21 48.937	+2.5210	+ .0017	.0000	−22 31 34.54	−1.905	− .365	− .003	4	18.54
2677	BD+47° 1299	B9	6.34	6.62	21 49.553	4.5220	− .0060	− .0020	+47 27 10.78	1.906	.656	+ .008	4 5	19.30 18.47
2678	BD−16° 1475	K0	8.9	8.0	21 52.763	2.6826	+ .0014	+ .001	−16 20 43.50	1.911	.389	+ .02	5	17.63
2679	BD+50° 1308 m.	G0	*9.50*	9.5	21 53.097	4.6699	− .0070	+ .001	+50 12 43.09	1.911	.677	− .05	4	18.57
2680	BD+71° 353		*9.30*		22 30.71	7.1118	− .0334	− .0044	+71 46 33.48	1.966	1.031	− .054	4	18.90
2681	Lal 12343	A0	5.73	5.96	6 22 36.512	+3.0388	+ .0007	+ .0004	− 1 27 32.35	−1.974	− .440	− .030	4	17.97
2682	CD−24° 4016		10.2	ft.	22 38.475	2.4750	+ .0016	+ .0020	−24 12 11.02	1.977	.358	− .098	4	18.66
2683	BD+40° 1611		9.4		22 58.360	4.2016	− .0043	.000	+40 19 55.95	2.006	.609	− .04	4	18.65
2684	BD− 4° 1513	A0	8.7	8.2	23 1.192	2.9663	+ .0008	− .0003	− 4 34 35.48	2.010	.429	+ .046	4	18.85
2685	BD+24° 1273	G5	*9.23*		23 5.805	3.6732	− .0016	+ .003	+24 18 19.75	2.017	.532	− .06	4	18.25
2686	BD+34° 1355	A3	7.62	7.35	6 23 10.000	+3.9879	− .0030	.000	+34 32 34.03	−2.023	− .577	.00	4	18.15
2687	BD−20° 1392	A0	7.32	7.86	23 45.810	2.5792	+ .0015	− .0030	−20 22 15.01	2.076	.372	− .040	4	18.55
2688	6 Lyncis	G5	5.96	5.98	23 50.420	5.2182	− .0124	− .0014	+58 13 23.25	2.081	.757	− .330	4	19.24
2689	Lal 12356	G5	6.33	6.39	23 51.693	3.4611	− .0008	− .0061	+16 17 24.77	2.085	.501	− .061	4	18.47
2690	BD− 6° 1560	B9	9.0	8.9	23 57.828	2.9274	+ .0009	+ .003	− 6 14 29.32	2.092	.423	+ .02	4	17.97
2691	10 Monocerotis	B3	4.98	5.72	6 24 0.512	+2.9632	+ .0008	− .0002	− 4 42 42.61	−2.096	− .429	+ .014	4	18.75
2692	BD+80° 215		8.55	9.1	24 2.22	10.8130	− .1127	− .0177	+80 15 23.66	2.098	1.566	+ .030	4	18.83
2693	CD−28° 3015		8.5		24 6.826	2.3537	+ .0017	− .0008	−28 24 54.28	2.105	.340	+ .038	4	18.95
2694	BD+61° 890	G5	*7.89*	7.44	24 10.69	5.5104	− .0154	.000	+61 24 14.67	2.111	.798	+ .01	4	17.91
2695	ν Geminorum m.	B5	4.06	4.26	24 12.776	3.5633	− .0013	− .0006	+20 15 50.42	2.114	.516	− .021	110 88	19.37 19.60
2696	BD+36° 1446	A0	*8.87*	8.80	6 24 21.652	+4.0616	− .0038	.000	+36 39 22.07	−2.127	− .588	− .04	5	18.64
2697	BD+59° 985	F0	*9.35*		24 22.174	5.3344	− .0137	+ .001	+59 33 58.29	2.127	.772	− .02	4	18.48
2698	BD− 8° 1443	B9	8.3	8.70	24 57.921	2.8759	+ .0010	− .001	− 8 25 39.80	2.179	.416	.00	5	18.48
2699	BD+29° 1244	A2	*9.44*	9.1	25 0.218	3.8270	− .0027	− .0026	+29 35 24.11	2.183	.554	− .016	4	18.48
2700	BD+ 7° 1306	G5	8.1	8.40	25 2.500	3.2488	− .0002	− .004	+ 7 33 5.67	2.186	.470	− .02	4	18.62

2647. 11$^{\mathrm{m}}$2, 1″6, 162°.
2650. 10$^{\mathrm{m}}$3, 5″7, 79°.

2661. 6$^{\mathrm{m}}$54, 14″, 25°.
2679. 9$^{\mathrm{m}}$7-11$^{\mathrm{m}}$5, 2″3, 332°.

2695. 4$^{\mathrm{m}}$5-5$^{\mathrm{m}}$1, 0″2, 9.6 yrs.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2701	Wi (2) 6^{h} 601	A2	6.85	6.7	6 25 19.130	+ 3.7868	−0.0025	−0.0010	+28 15 58.54	−2.210	−0.548	−0.006	4	18.54
2702	BD+13° 1279	K5	7.7	8.24	25 26.732	3.3957	− .0008	− .002	+13 40 8.51	2.221	.491	+ .02	5	18.05
2703	BD+25° 1302	K0	8.6	8.20	25 42.685	3.7186	− .0021	− .0007	+25 56 20.60	2.244	.538	− .011	5	18.04
2704	Lal 12509 *br.*	A2	6.85	6.93	26 3.732	2.5217	+ .0015	+ .0005	−22 32 15.61	2.274	.364	− .013	4	18.42
2705	BD+37° 1525		*8.72*	8.62	26 9.067	4.0912	− .0042	.000	+37 29 35.45	2.282	.591	− .02	6	18.03
2706	BD+ 3° 1266	F8	8.8	8.63	6 26 11.925	+ 3.1418	+ .0002	− .0035	+ 2 58 41.99	−2.287	− .454	− .013	4	18.57
2707	BD− 9° 1493	K0	6.13	5.89	26 24.261	2.8380	+ .0010	+ .0002	−10 1 35.80	2.304	.410	− .016	4	18.66
2708	CD−27° 3037	A2	8.9		26 40.132	2.3857	+ .0016	− .0008	−27 22 2.33	2.327	.344	− .018	4	18.75
2709	Oelt 6961	K5	7.14	6.77	26 50.049	4.4950	− .0075	− .0012	+46 58 51.35	2.342	.649	− .018	4	18.38
2710	BD+18° 1247	K0	*9.45*		27 7.804	3.5154	− .0013	+ .001	+18 26 54.43	2.367	.508	− .02	4	18.76
2711	BD−17° 1515	G5	7.74	7.8	6 27 8.780	+ 2.6451	+ .0013	− .0137	−17 51 40.09	−2.369	− .381	− .237	4	18.38
2712	BD+11° 1208	K5	*8.30*	8.52	27 14.191	3.3345	− .0006	− .003	+11 9 33.32	2.377	.482	− .02	4	18.21
2713	BD+31° 1325	A0	9.4		27 23.394	3.8820	− .0034	+ .0031	+31 22 58.08	2.390	.561	− .001	4	18.75
2714	Grmb 1173 *s.f.*	A3	7.44	6.65	27 33.694	4.8030	− .0104	− .0003	+52 31 21.96	2.405	.694	− .088	4	17.62
2715	BD+ 5° 1282	B2	7.66	7.92	27 37.250	3.1909	− .0001	.0000	+ 5 5 26.73	2.410	.460	− .022	4	18.22
2716	Carr 910	A2	6.39	6.90	6 27 38.08	+12.7403	− .1946	+ .0044	+82 11 11.04	−2.411	−1.842	− .047	9	18.57
2717	BD−12° 1519	G5	8.5	7.78	27 41.088	2.7866	+ .0010	.0000	−12 10 10.02	2.415	.402	+ .018	4	17.55
2718	BD− 0° 1326	K0	8.73	8.76	27 59.825	3.0718	+ .0003	− .0041	− 0 2 48.81	2.443	.444	− .016	4	17.97
2719	BD+69° 385	A5	*8.40*	8.5	28 10.27	6.6050	− .0335	− .0032	+69 25 16.16	2.458	.954	− .001	4	17.81
2720	BD+72° 324	F5	*8.64*	8.5	28 21.79	7.3875	− .0475	+ .0050	+72 54 57.69	2.474	1.068	+ .015	4	17.98
2721	13 Monocerotis	A0	4.50	4.69	6 28 34.647	+ 3.2447	− .0003	+ .0002	+ 7 23 33.88	−2.493	− .469	− .010	4	19.00
2722	BD+39° 1669		8.8	8.6	28 56.476	4.1665	− .0056	+ .002	+39 31 35.60	2.525	.602	− .02	4	18.00
2723	BD− 1° 1271	F2	8.3	8.43	29 1.992	3.0348	+ .0003	+ .0009	− 1 38 21.96	2.533	.438	− .011	4	18.05
2724	BD+23° 1403	G5	*9.00*	8.68	29 10.647	3.6384	− .0022	− .004	+23 6 37.52	2.545	.525	+ .01	4	17.82
2725	BD+54° 1050	A0	*8.50*	8.33	29 13.990	4.9414	− .0125	+ .002	+54 39 8.80	2.550	.717	− .01	4	18.51
2726	BD+ 6° 1284	K2	*9.40*	9.3	6 29 21.668	+ 3.2124	− .0003	− .002	+ 6 0 54.62	−2.561	− .463	.00	4	18.10
2727	BD+49° 1516	B9	8.07	8.60	29 38.745	4.6489	− .0098	− .001	+49 56 46.13	2.586	.671	.00	4	18.09
2728	BD+48° 1403		9.0	9.4	29 54.405	4.5691	− .0091	− .001	+48 28 37.38	2.608	.659	+ .01	4	18.06
2729	BD−14° 1493 *br.*	A0	9.0	8.9	30 7.621	2.7396	+ .0011	− .0010	−14 6 48.62	2.627	.396	+ .016	4	18.59
2730	BD+43° 1565	G5	7.10	6.62	30 7.676	4.3418	− .0072	− .0014	+43 46 12.70	2.627	.627	− .024	5	18.01
2731	CD−24° 4167	A0	8.1	8.33	6 30 10.354	+ 2.4785	+ .0016	.0000	−24 9 36.49	−2.631	− .356	− .002	5	18.30
2732	BD+16° 1202	B9	7.5	7.39	30 18.951	3.4733	− .0015	− .002	+16 49 38.06	2.644	.500	− .02	5	18.86
2733	8 Lyncis	G0	6.05	5.69	30 23.03	5.5177	− .0197	− .0274	+61 33 12.05	2.650	.796	− .280	4	19.20
2734	BD+32° 1339	G0	*9.21*	8.87	30 26.506	3.9252	− .0042	+ .001	+32 45 53.93	2.655	.566	.00	5	18.11
2735	BD+64° 593	F5	7.45	7.94	30 28.78	5.8876	− .0249	+ .0044	+64 48 5.63	2.658	.849	− .008	4	18.42
2736	BD+21° 1292	B8	*8.25*	8.35	6 30 39.474	+ 3.5942	− .0021	− .002	+21 29 38.65	−2.673	− .518	− .01	4	18.54
2737	BD− 4° 1571	A0	8.4	7.99	30 53.437	2.9757	+ .0005	+ .0003	− 4 11 29.87	2.694	.429	+ .026	4	18.40
2738	BD+14° 1349	F5	*9.52*		31 13.446	3.4040	− .0012	.000	+14 3 1.58	2.723	.490	+ .03	5	18.51
2739	BD+75° 262		*8.58*	8.38	31 33.60	8.2923	− .0730	− .0008	+75 46 13.22	2.752	1.196	+ .033	5	19.28
2740	Lac 2347	B9	5.57		31 37.332	2.2245	+ .0016	− .0003	−32 39 8.13	2.757	.319	+ .008	4	19.24
2741	ξ^2 Can Maj	A0	4.54	4.83	6 31 42.180	+ 2.5136	+ .0014	+ .0004	−22 54 1.91	−2.764	− .361	+ .013	4	18.61
2742	BD−15° 1446	F0	8.1	7.78	31 57.798	2.6947	+ .0011	− .0003	−15 56 31.96	2.787	.388	− .010	4	18.14
2743	BD+ 1° 1420	B9	*7.91*	7.70	32 28.264	3.0986	.0000	− .0018	+ 1 7 15.68	2.830	.446	− .032	4	18.66
2744	BD+55° 1100	A5	*8.47*	8.4	32 30.230	4.9784	− .0144	.000	+55 13 30.02	2.833	.717	− .04	4	18.82
2745	23 H Camelop	F8	5.60	5.42	32 36.49	10.3193	− .1354	− .0287	+79 39 17.08	2.842	1.488	− .615	10 9	18.50 18.78
2746	Pi 6^{h} 171	B9	5.48	5.5	6 32 39.022	+ 2.9536	+ .0005	+ .0002	− 5 8 37.87	−2.847	− .426	− .011	4	18.58
2747	BD+67° 442	A0	*8.90*	8.7	32 44.72	6.2108	− .0319	− .0005	+67 8 41.62	2.855	.895	− .013	4	19.10
2748	Brad 975 *br.*	G5	5.81	6.0	32 52.677	2.6278	+ .0013	− .0016	−18 35 35.87	2.866	.379	+ .005	4	19.20
2749	BD+47° 1319		*9.66*		32 59.816	4.5018	− .0095	+ .005	+47 13 8.04	2.876	.649	− .01	4	19.49
2750	CD−26° 3173	K0	8.0	7.3	33 2.458	2.4261	+ .0015	.0000	−26 3 24.20	2.880	.349	− .005	4	18.83
2751	BD+ 4° 1350	K0	*8.95*		6 33 2.473	+ 3.1667	− .0004	.0000	+ 4 3 58.78	−2.880	− .455	− .008	4	18.81
2752	γ Geminorum	A0	1.93	2.49	33 5.429	3.4636	− .0018	+ .0031	+16 28 7.61	2.884	.498	− .047	89 69	19.14 19.41
2753	51 Aurigæ	K0	5.71	5.70	33 6.978	4.1613	− .0065	− .0021	+39 27 45.70	2.886	.599	− .116	5	19.31
2754	BD+62° 867	A2	6.55	6.81	33 7.71	5.5590	− .0222	− .0034	+61 59 36.51	2.887	.801	+ .024	4	18.85
2755	BD+ 9° 1306	G5	7.5	7.59	33 9.124	3.2872	− .0009	− .008	+ 9 12 52.40	2.890	.473	− .09	4	18.48
2756	BD+44° 1503	G5	8.7	8.8	6 33 28.649	+ 4.3752	− .0084	− .003	+44 34 22.27	−2.918	− .629	− .10	4	18.17
2757	Lal 12714	K0	6.42	6.15	33 29.581	3.1368	− .0003	− .0040	+ 2 46 26.94	2.919	.451	− .065	4	18.36
2758	Wi (2) 6^{h} 900	K0	6.28	6.38	34 16.547	3.6093	− .0027	+ .0005	+22 6 8.59	2.987	.519	− .016	4	18.49
2759	BD+78° 231		*9.10*		34 19.67	9.6581	− .1201	− .0020	+78 39 16.25	2.991	1.391	+ .014	4	19.10
2760	BD+ 7° 1386	B2	7.4	7.10	34 29.191	3.2343	− .0008	− .002	+ 6 58 21.99	3.005	.464	+ .01	5	18.41

2704. $8^{m}9$, $2''6$, 119°.

2714. $7^{m}7$, $4''6$, 329°.

2729. 13^{m}, $2''0$, 5°.

2748. $8^{m}0$, 17″, 264°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2761	BD+28° 1198	G0	8.8	8.60	6 34 32.230	+3.7883	−0.0040	−0.0030	+28 26 29.54	−3.009	−0.545	−0.005	5	18.24
2762	BD+12° 1231	M0	8.9	8.3	34 33.866	3.3670	− .0014	.000	+12 33 33.85	3.011	.484	+ .02	4	19.31
2763	BD+34° 1421	K0	*9.50*		34 35.672	3.9683	− .0052	+ .003	+34 8 7.36	3.014	.570	− .08	4	19.35
2764	BD+53° 1049	F5	*7.65*	7.48	34 36.237	4.8562	− .0139	+ .004	+53 28 17.48	3.015	.699	.00	4	18.47
2765	BD− 9° 1558	G5	9.2		34 46.806	2.8471	+ .0007	− .008	− 9 41 32.81	3.030	.409	+ .11	4	19.16
2766	BD+17° 1338	B9	*8.68*	8.34	6 34 55.776	+3.4961	− .0022	.000	+17 46 30.76	−3.043	− .503	.00	4	18.33
2767	BD−19° 1512		9.2		34 57.874	2.5934	+ .0012	− .0025	−19 56 45.98	3.046	.372	+ .015	5	18.78
2768	BD+37° 1558	F2	*8.62*	8.0	35 4.845	4.0801	− .0063	− .001	+37 20 4.85	3.056	.587	− .05	4	18.69
2769	CD−27° 3150	A5	10.2	ft.	35 6.278	2.3921	+ 0015	+ .0016	−27 15 48.28	3.058	.343	− .032	4	19.83
2770	BD+50° 1335	A	*9.08*	8.6	35 8.210	4.6551	− .0119	+ .002	+50 9 6.47	3.061	.669	− .008	4	18.74
2771	BD+23° 1446	F5	7.8	7.98	6 35 13.077	+3.6537	− .0032	.000	+23 44 49.46	−3.068	− .525	− .01	4	18.16
2772	BD+26° 1309	A3	*9.36*		35 17.775	3.7259	− .0037	+ .0001	+26 19 16.81	3.075	.535	− .012	4	19.09
2773	BD−11° 1575	G5	9.2		35 30.453	2.7923	+ .0008	+ .0036	−11 59 31.21	3.093	.401	− .020	4	18.59
2774	BD− 7° 1509 *m.*	A3	9.1	8.4	35 46.558	2.8882	+ .0005	.000	− 7 57 17.58	3.116	.414	+ .02	5	18.41
2775	BD− 1° 1320	A	8.9		35 59.748	3.0345	.0000	− .0035	− 1 39 22.16	3.135	.435	− .011	4	18.94
2776	CD−23° 4168	A	8.9		6 36 0.859	+2.4923	+ .0014	+ .0043	−23 44 23.64	−3.137	− .359	+ .016	4	18.52
2777	BD+ 5° 1356	A2	9.01	9.2	36 2.334	3.1878	− .0006	− .0005	+ 4 59 6.97	3.139	.458	− .013	6	19.17
2778	BD−21° 1538	B9	8.4		36 5.178	2.5472	+ .0013	− .0002	−21 42 46.09	3.143	.365	− .014	4	19.16
2779	BD−13° 1596	A0	8.7	8.4	36 19.764	2.7464	+ .0009	+ .0035	−13 53 25.67	3.164	.394	− .019	4	18.47
2780	BD+77° 255	A0	*8.75*	9.25	36 29.51	9.0046	− .1063	− .0040	+77 27 36.60	3.178	1.295	− .027	4	18.54
2781	BD+42° 1592		9.5		6 36 33.076	+4.2998	− .0087	− .007	+42 55 32.29	−3.183	− .618	− .01	4	19.09
2782	15 Monocerotis *br.*	O5	4.76	4.94	36 34.326	3.3046	− .0012	+ .0002	+ 9 58 14.33	3.185	.475	− .007	4	18.11
2783	Wi (1) 6h 999	Ma	6.43	6.17	36 50.706	3.3310	− .0014	− .0008	+11 4 42.95	3.209	.478	+ .003	4	18.31
2784	BD+21° 1339	A0	*8.83*	8.5	37 1.302	3.5859	− .0030	− .0007	+21 15 47.97	3.224	.514	− .010	4	18.08
2785	BD+56° 1147	G5	*9.05*	9.1	37 8.391	5.0453	− .0175	+ .001	+56 14 5.15	3.234	.725	− .09	4	18.25
2786	BD+49° 1534	K0	7.72	7.68	6 37 10.134	+4.6158	− .0122	+ .0080	+49 28 54.27	−3.237	− .663	+ .003	4	18.91
2787	Wi (2) 6h 1001	G5	6.87	6.40	37 31.825	3.9171	− .0054	− .0014	+32 38 12.40	3.268	.562	− .012	4	18.57
2788	BD+58° 962	K2	*8.40*	8.36	37 48.290	5.2062	− .0201	+ .002	+58 17 28.74	3.292	.747	− .07	4	18.18
2789	BD+18° 1322	A3	7.7	8.23	38 28.909	3.5019	− .0025	.000	+18 2 33.27	3.350	.502	− .03	4	18.23
2790	BD− 3° 1560	A2	7.5	7.17	38 38.759	2.9862	+ .0001	− .0006	− 3 45 26.38	3.364	.428	+ .018	4	17.56
2791	BD+40° 1696 *br.*	Ma	7.08	7.07	6 38 41.329	+4.2060	− .0082	− .0015	+40 42 24.21	−3.368	− .604	− .170	4	18.27
2792	BD+16° 1259 *m.*	A5	8.9	9.3	38 57.318	3.4632	− .0024	.000	+16 30 53.16	3.391	.497	− .01	4	18.62
2793	BD− 7° 1534	F5	9.4		38 57.680	2.8968	+ .0004	− .002	− 7 36 28.93	3.391	.415	+ .01	5	18.35
2794	BD+ 0° 1555	G5	*8.29*	9.10	38 59.931	3.0759	− .0003	+ .0034	+ 0 8 19.35	3.394	.440	− .030	4	17.69
2795	ε Geminorum	G5	3.18	3.25	39 0.634	3.6928	− .0040	.0000	+25 12 41.64	3.396	.529	− .020	93 44	19.11 18.56
2796	BD− 5° 1763	K5	9.1	8.6	6 39 28.807	+2.9428	+ .0002	+ .001	− 5 38 13.00	−3.436	− .422	.00	4	18.34
2797	BD+46° 1181	A0	9.9		39 37.726	4.4735	− .0115	− .001	+46 46 44.39	3.449	.640	− .04	4	18.58
2798	BD+84° 135	G5	*7.87*	7.33	39 52.87	17.4243	− .5894	− .0547	+84 45 37.03	3.470	2.490	+ .064	4	18.25
2799	Brad 976	G5	5.47	5.65	40 0.492	5.1189	− .0200	+ .0036	+57 15 14.46	3.481	.734	− .042	4	18.70
2800	BD−15° 1489	K2	7.7	7.16	40 6.146	2.6962	+ .0009	− .0002	−15 58 6.56	3.490	.385	− .005	5	17.22
2801	BD+ 3° 1382	B5	*7.79*	7.78	6 40 36.876	+3.1592	− .0008	+ .0012	+ 3 45 44.88	−3.534	− .453	− .004	4	18.33
2802	Lac 2417	G5	6.78	6.53	40 38.081	2.4467	+ .0014	− .0042	−25 27 12.26	3.535	.349	− .002	4	18.74
2803	BD+71° 366	F	*9.10*	9.4	40 41.77	6.9122	− .0561	− .0029	+71 5 24.65	3.541	.990	− .044	4	18.03
2804	BD+37° 1580	A0	8.4	9.1	40 47.854	4.0889	− .0076	− .001	+37 41 30.33	3.549	.585	− .01	4	18.03
2805	ξ Geminorum	F5	3.40	3.39	40 47.973	3.3759	− .0020	− .0078	+12 58 59.05	3.550	.483	− .201	79 62	19.02 18.99
2806	BD+ 9° 1374 *m.*	B9	8.22	8.4	6 40 49.972	+3.2992	− .0016	− .002	+ 9 46 15.18	−3.552	− .472	− .02	4	18.31
2807	ψ^2 Aurigae	G0	5.34	5.45	40 58.473	4.3275	− .0101	+ .0007	+43 39 30.40	3.565	.619	+ .158	4	18.83
2808	BD+29° 1342	K5	*8.23*	7.75	41 27.337	3.8293	− .0054	− .0005	+29 55 31.11	3.606	.548	− .007	4	18.49
2809	Brad 984	K0	5.28	5.13	41 33.764	4.5781	− .0132	− .0009	+48 52 31.84	3.615	.655	+ .002	4	18.75
2810	α Can Maj *br.*	A0	−1.58		41 37.149	2.6807	+ .0009	− .0368	−16 36 24.69	3.621	.383	−1.205	22	22.62
2811	BD−17° 1610		9.0		6 41 54.875	+2.6519	+ .0010	− .001	−17 45 27.76	−3.646	− .379	− .02	4	18.65
2812	Brad 991	B3	5.84	*6.02*	42 10.635	3.2731	− .0016	− .0005	+ 8 40 22.60	3.668	.467	− .003	4	19.23
2813	BD+26° 1351	F0	*8.55*	8.36	42 12.417	3.7319	− .0047	− .0007	+26 38 51.36	3.671	.533	+ .018	4	18.64
2814	CD−28° 3378	K0	9.0		42 15.419	2.3638	+ .0014	+ .0012	−28 21 11.83	3.675	.336	− .005	4	18.38
2815	BD+66° 467	G0	8.55	8.46	42 23.65	6.0747	− .0389	− .0018	+66 22 7.56	3.687	.869	+ .028	4	18.62
2816	BD+ 4° 1440	G5	*8.02*	7.63	6 42 29.480	+3.1748	− .0010	− .0012	+ 4 26 45.91	−3.695	− .453	− .036	4	18.60
2817	BD+41° 1513	K2	8.0	7.72	42 43.649	4.2300	− .0096	− .004	+41 23 25.63	3.716	.604	− .01	4	19.33
2818	BD+74° 303	G5	*7.70*	7.35	42 47.79	7.7220	− .0816	− .0022	+74 13 45.31	3.721	1.105	− .009	4	18.18
2819	BD+19° 1479	A	8.7	9.1	42 51.447	3.5256	− .0032	.000	+19 1 45.11	3.727	.504	− .01	5	18.63
2820	BD+85° 98	Ma	*8.07*	8.38	42 58.11	20.446	− .915	+ .007	+85 40 42.18	3.737	2.926	− .001	4	18.01

2774. 9^{m}5–9^{m}2, 0″.8, 240°.
2782. 7^{m}6, 3″.0, 212°.

2791. 8^{m}8, 25″, 117°.
2792. 9^{m}0–9^{m}6, 0″.3, 300°.

2806. 8^{m}3–11^{m}8, 0″.8, 171°.
2810. 8^{m}11, 11″, 68°, 49.3 yrs.; for c. g. add +^{s}100, +1″.53 (1922.62); p. m. is for c. g.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2821	BD+11° 1305	M0	*9.30*	9.2	6 42 59.429	+3.3485	−0.0020	−0.003	+11 51 48.92	−3.738	−0.479	−0.02	4	18.90
2822	BD− 9° 1645	G5	8.5	8.40	43 1.192	2.8629	+ .0003	− .002	− 9 4 40.48	3.741	.408	+ .02	4	19.21
2823	BD+61° 910	G5	*8.57*	8.44	43 7.65	5.4432	− .0272	− .032	+61 1 24.07	3.750	.778	− .18	4	18.84
2824	BD+22° 1475	K0	*8.40*	9.11	43 8.886	3.6094	− .0038	− .002	+22 14 8.53	3.752	.516	− .02	4	18.15
2825	Brad 1001	B8	6.00	6.13	43 35.861	2.5709	+ .0011	− .0005	−20 55 40.92	3.790	.366	− .002	4	18.26
2826	BD−19° 1557	K0	8.9	8.68	6 43 36.454	+2.6067	+ .0011	− .0055	−19 33 5.34	−3.791	− .372	+ .017	5	18.22
2827	18 Monocerotis	K0	4.70	4.27	43 41.371	3.1300	− .0009	− .0004	+ 2 30 2.72	3.798	.447	− .025	4	18.44
2828	BD−11° 1636	F8	8.5	9.21	44 4.164	2.8026	+ .0006	− .002	−11 38 10.05	3.831	.400	+ .06	5	18.26
2829	BD+44° 1539	A2	*9.53*	9.1	44 10.062	4.3662	− .0115	− .002	+44 36 9.88	3.839	.623	− .04	4	18.31
2830	CD−23° 4375 *br.*	A3	9.7	ft.	44 15.202	2.4951	+ .0013	+ .0007	−23 46 12.12	3.847	.357	+ .003	4 5	17.74 17.82
2831	BD+38° 1617	A3	7.70	7.95	6 44 36.626	+4.1313	− .0090	+ .0079	+38 55 7.89	−3.877	− .589	− .036	6	19.40
2832	BD+24° 1414	F8	*9.43*		44 51.892	3.6791	− .0046	− .0001	+24 49 38.73	3.899	.524	− .022	4	18.42
2833	BD+15° 1332	A	9.01	8.4	45 4.506	3.4232	− .0027	− .001	+14 58 21.71	3.917	.488	.00	4	18.22
2834	43 Camelop	B5	5.13	5.33	45 5.21	6.4839	− .0510	+ .0019	+68 59 0.37	3.917	.925	+ .009	12	18.60
2835	ψ⁷ Aurigæ	K0	5.04	5.55	45 6.652	4.2476	− .0104	− .0016	+41 52 36.60	3.920	.605	− .135	4	18.93
2836	Brad 997	B8	5.69	6.1	6 45 13.559	+3.4558	− .0029	− .0013	+16 17 41.61	−3.930	− .492	− .013	4	18.29
2837	Lal 13143	A0	5.65	5.91	45 14.656	3.0228	− .0005	+ .0006	− 2 10 50.45	3.931	.431	+ .029	4	18.03
2838	Pulk (55) 1121 *m.*	B5	5.29	5.41	45 20.090	2.7203	+ .0008	− .0003	−15 3 12.64	3.940	.388	− .019	4	18.59
2839	BD+31° 1421	M3	8.4	8.35	45 27.834	3.8752	− .0065	+ .0010	+31 29 23.52	3.950	.552	− .020	4	17.91
2840	BD+35° 1497		*9.41*		45 30.622	4.0065	− .0078	.000	+35 28 49.17	3.956	.571	.00	4	18.57
2841	BD+47° 1355	K2	9.2	8.63	6 45 34.689	+4.5011	− .0137	− .023	+47 28 38.00	−3.960	− .641	− .73	4	18.83
2842	BD+ 3° 1422	F2	*9.28*		45 51.241	3.1441	− .0010	− .0012	+ 3 7 17.58	3.984	.447	− .033	4	18.88
2843	BD+ 0° 1635	B9	8.34	8.9	45 57.730	3.0922	− .0008	− .0009	+ 0 51 4.36	3.993	.440	− .003	4	18.86
2844	BD− 3° 1612	A2	9.4	9.4	45 59.078	2.9864	− .0002	.0000	− 3 46 13.22	3.995	.425	+ .010	4	18.78
2845	BD− 5° 1815	B5	7.30	7.45	45 59.648	2.9485	− .0001	+ .0001	− 5 25 14.68	3.996	.420	− .021	4	18.41
2846	BD+20° 1589	K2	8.30	7.85	6 46 6.246	+3.5515	− .0038	− .001	+20 5 3.23	−4.005	− .507	.00	4	18.40
2847	BD+50° 1363	F5	*8.77*	8.9	46 19.458	4.6345	− .0157	.000	+50 1 51.81	4.024	.660	− .03	5	17.31
2848	BD−13° 1677	A0	8.3		46 25.315	2.7580	+ .0006	+ .0010	−13 31 9.27	4.032	.392	− .032	5 4	18.46 18.31
2849	κ Can Maj	B2	3.78		46 51.174	2.2419	+ .0014	− .0008	−32 24 55.89	4.070	.318	+ .001	4	18.28
2850	BD+52° 1141	A3	*9.56*	9.2	46 52.585	4.7834	− .0182	+ .002	+52 35 20.50	4.071	.681	− .02	4	18.14
2851	Wi (2) 6ʰ 1310	A2	6.62	6.78	6 47 2.134	+3.7040	− .0052	− .0008	+25 45 29.35	−4.085	− .527	+ .018	4	18.02
2852	CD−25° 3693	F2	8.7		47 23.690	2.4537	+ .0012	.0000	−25 19 38.50	4.116	.349	− .022	4	18.24
2853	θ Geminorum	A2	3.64	3.72	47 31.015	3.9567	− .0077	+ .0005	+34 3 32.16	4.127	.562	− .054	18	[illegible]
2854	BD− 7° 1602		9.2	8.93	47 54.609	2.9079	.0000	− .001	− 7 11 6.71	4.160	.413	+ .04	4	18.17
2855	BD+54° 1082	A2	*9.50*	9.1	48 22.882	4.8956	− .0205	.000	+54 22 4.59	4.200	.697	− .07	4	18.70
2856	24 H Camelop	K5	4.75	4.69	6 48 25.28	+8.7696	− .1315	+ .0249	+77 4 56.05	−4.204	−1.248	− .015	8	17.99
2857	CD−29° 3565	K0	7.9	7.86	48 25.524	2.3401	+ .0013	− .0008	−29 16 44.23	4.204	.332	− .017	4	18.08
2858	BD−17° 1656	F0	9.4		48 29.828	2.6684	+ .0008	− .0012	−17 11 50.07	4.210	.378	+ .013	4	19.41
2859	BD+ 9° 1424	A0	8.77		48 48.715	3.3005	− .0023	− .002	+ 9 53 35.24	4.237	.469	− .02	4	18.33
2860	BD+33° 1428	B9	*8.30*	8.30	48 59.942	3.9241	− .0075	− .001	+33 6 7.49	4.253	.557	− .03	5	18.57
2861	BD+17° 1435	K2	*9.18*	9.3	6 49 23.790	+3.4900	− .0036	+ .002	+17 43 40.37	−4.287	− .495	− .02	4	18.56
2862	BD+27° 1258	A0	*9.02*	9.12	49 27.029	3.7539	− .0060	+ .0012	+27 33 31.74	4.292	.532	− .030	4	18.83
2863	Grmb 1237	F0	6.04	6.33	49 28.310	4.3337	− .0126	+ .0012	+44 0 39.63	4.293	.615	− .021	4	18.74
2864	BD− 9° 1705	B8	7.9	8.21	49 30.410	2.8521	+ .0002	− .001	− 9 35 28.03	4.296	.405	.00	4	18.75
2865	BD+30° 1357	B8	7.91	7.83	49 41.255	3.8240	− .0067	+ .0013	+29 55 41.46	4.312	.543	− .002	4	18.63
2866	BD+ 6° 1426	B9	8.1	9.1	6 49 43.620	+3.2309	− .0018	− .003	+ 6 54 48.57	−4.315	− .458	.00	4	18.73
2867	ε Geminorum *br.*	F0	4.82	5.14	50 7.896	3.3806	− .0029	+ .0050	+13 16 49.69	4.350	.479	− .085	4	[illegible]
2868	BD+12° 1339	G5	8.5	8.77	50 10.728	3.3633	− .0028	− .003	+12 33 31.29	4.354	.477	+ .01	4	18.81
2869	15 Lyncis *m.*	G0	4.54	4.4	50 21.266	5.2034	− .0272	+ .0006	+58 31 45.55	4.369	.739	− .134	5	18.05
2870	θ Can Maj	K2	4.25	4.13	50 28.382	2.7970	+ .0003	− .0093	−11 56 15.06	4.379	.396	− .015	81 70	19.21 19.38
2871	BD+74° 307		*9.34*		6 50 38.38	+7.8695	− .1021	− .0138	+74 47 35.84	−4.393	−1.118	− .036	4	18.43
2872	BD+58° 984	K5	*8.76*	8.5	50 47.719	5.1945	− .0272	+ .006	+58 25 57.68	4.407	.737	.00	4	18.32
2873	CD−27° 3384	A0	8.7	8.3	50 50.538	2.3895	+ .0013	− .0009	−27 39 34.05	4.411	.338	− .008	4	19.70
2874	BD+ 4° 1506	K0	8.30	8.05	50 52.810	3.1805	− .0015	− .0002	+ 4 43 34.12	4.414	.451	− .025	4	18.32
2875	CD−23° 4553	Ob	6.55	[illegible]	50 53.267	2.4970	+ .0011	.0000	−23 49 38.24	4.414	.354	− .002	4	18.15
2876	BD−19° 1601	G5	9.1		6 50 53.756	+2.6146	+ .0008	+ .0017	−19 21 50.42	−4.415	− .370	+ .025	4	18.60
2877	BD+79° 223		*8.80*	8.5	51 1.67	9.9576	− .1947	− .0047	+79 16 49.14	4.426	1.414	− .021	4	18.97
2878	BD−21° 1645	A2	8.7	8.5	51 21.044	2.5524	+ .0010	.0000	−21 46 7.66	4.453	.361	+ .009	5	18.64
2879	BD+42° 1625	F5	8.4	8.60	51 28.799	4.2487	− .0120	− .002	+42 4 18.96	4.465	.601	− .07	5	17.60
2880	BD−11° 1693	A2	9.8		51 40.712	2.8107	+ .0003	− .0010	−11 22 29.92	4.482	.397	+ .020	4	18.75

2830. 10^{m}9, 2$''$7, 104°.

2838. 5^{m}4–7^{m}0, 1$''$0, 293°.

2867. 7^{m}1, 6$''$6, 157°.

2869. 4^{m}9–6^{m}0, 0$''$8, 22°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2881	BD+32° 1447	A5	*8.44*	8.58	6 51 54.160	+ 3.8990	−0.0079	+0.002	+32 23 42.61	−4.501	−0.552	−0.02	4	18.33
2882	Pulk (55) 1134	B8	5.88	6.0	52 1.703	3.3037	− .0025	− .0017	+10 3 40.30	4.512	.467	− .011	4	17.82
2883	BD− 0° 1501	K5	8.3	8.54	52 17.799	3.0522	− .0009	− .0045	− 0 54 14.67	4.534	.431	− .014	4	18.77
2884	BD+68° 461		*8.67*	8.7	52 23.10	6.2849	− .0541	+ .0004	+67 56 30.37	4.542	.890	.000	4	18.81
2885	ι Can Maj	B5	4.39	4.7	52 34.109	2.6761	+ .0007	− .0001	−16 56 58.91	4.558	.378	+ .011	4	18.14
2886	BD+55° 1147	G	*9.50*		6 53 15.448	+ 4.9658	− .0242	− .003	+55 30 46.33	−4.616	− .703	− .03	4	18.20
2887	BD+63° 676 br.	F5	*9.32*		53 19.98	5.6946	− .0397	− .004	+63 37 16.23	4.623	.806	− .08	4	19.05
2888	BD+19° 1555	F0	*9.00*	8.9	53 21.636	3.5213	− .0043	− .002	+19 2 1.20	4.625	.497	.00	6 5	18.44 18.76
2889	BD− 2° 1847	F0	9.4	8.8	53 24.880	3.0084	− .0007	− .0009	− 2 49 52.30	4.630	.424	− .013	4	18.72
2890	Brad 1010	K2	6.15	6.03	53 35.885	4.0943	− .0106	− .0029	+38 9 48.19	4.645	.579	− .128	6	19.52
2891	BD+80° 226		*8.93*	9.1	6 53 49.80	+10.6172	− .2427	− .0090	+80 13 32.77	−4.665	−1.503	− .005	4	17.98
2892	BD+45° 1372	G5	8.9	8.20	53 55.608	4.3763	− .0146	− .004	+45 5 21.18	4.673	.619	− .03	4	18.32
2893	BD+27° 1286	F0	*9.50*	9.1	53 59.171	3.7464	− .0065	+ .0038	+27 24 17.78	4.678	.531	+ .020	4	17.85
2894	BD+21° 1455	A5	*8.40*	8.30	54 11.373	3.5762	− .0049	− .001	+21 11 4.03	4.696	.506	− .01	4	18.41
2895	BD+33° 1445	A0	*8.66*	8.9	54 15.066	3.9381	− .0088	.000	+33 39 52.41	4.701	.556	.00	4	18.15
2896	BD−14° 1664	K5	8.9	8.03	6 54 22.732	+ 2.7317	+ .0005	+ .0015	−14 42 42.41	−4.712	− .385	+ .010	6	18.33
2897	BD−22° 1623	B5	9.2		54 39.916	2.5277	+ .0010	− .0017	−22 46 3.73	4.736	.356	+ .001	4	18.51
2898	Wi (1) 6ʰ 1575 br.	K0	6.02	6.33	54 44.540	3.1570	− .0017	− .0012	+ 3 42 42.61	4.743	.445	− .015	4	17.85
2899	CD−28° 3661		10.2		55 15.801	2.3544	+ .0013	− .0021	−28 57 55.93	4.787	.331	− .036	4	18.08
2900	BD+41° 1567		8.8	9.18	55 17.303	4.2161	− .0126	+ .003	+41 23 7.29	4.789	.595	.00	6	18.41
2901	BD− 5° 1900	A0	8.1	7.93	6 55 23.494	+ 2.9524	− .0005	.0000	− 5 17 58.56	−4.799	− .416	+ .010	4	18.07
2902	BD+ 1° 1622	K0	7.69	7.30	55 24.131	3.0960	− .0013	− .0031	+ 1 1 38.57	4.799	.436	− .021	5	18.11
2903	ε Can Maj br.	B1	1.63	2.29	55 28.885	2.3576	+ .0013	+ .0001	−28 51 45.03	4.805	.332	− .001	24	22.96
2904	BD+16° 1354	K2	5.86	5.51	55 40.001	3.4493	− .0039	− .001	+16 11 25.97	4.821	.486	− .01	4	17.89
2905	Cape (80) 3334	B8	6.38	6.2	55 40.019	2.2968	+ .0013	− .0005	−30 53 17.47	4.821	.323	+ .015	4	18.76
2906	BD+ 9° 1475 br.	F8	9.0		6 55 47.672	+ 3.2808	− .0026	− .006	+ 9 6 57.30	−4.832	− .462	+ .04	4	17.89
2907	BD+23° 1566	A0	7.01	7.56	55 49.560	3.6380	− .0058	− .001	+23 33 8.95	4.835	.513	− .02	4	18.03
2908	BD−12° 1729	B3	7.9	7.84	55 53.988	2.7759	+ .0003	.0000	−12 53 28.11	4.841	.390	+ .012	5 4	18.15 18.67
2909	BD+57° 1029	G5	*9.50*		55 57.766	5.1357	− .0290	+ .002	+57 50 55.89	4.846	.724	+ .02	4	18.88
2910	BD+51° 1270	K0	7.50	7.46	56 0.884	4.7135	− .0208	− .004	+51 40 59.23	4.851	.664	− .02	4	18.58
2911	BD+29° 1429	G5	7.86	7.73	6 56 3.569	+ 3.8167	− .0077	+ .0004	+29 50 54.78	−4.854	− .538	+ .007	4	18.06
2912	BD+70° 431	A0	*8.85*	8.8	56 8.47	6.7876	− .0737	− .0006	+70 45 41.35	4.861	.958	− .005	4	18.65
2913	BD+14° 1529	A2	*9.39*		56 25.477	3.4008	− .0035	− .002	+14 12 26.66	4.885	.480	.00	5	17.67
2914	BD+ 0° 1754	B8	*9.28*	9.1	56 25.569	3.0778	− .0012	− .0002	+ 0 13 30.76	4.886	.433	+ .013	4	18.84
2915	Wi (1) 6ʰ 1650	A0	5.84	6.18	56 33.127	2.8838	− .0002	− .0015	− 8 17 39.77	4.896	.406	+ .005	4 5	18.68 17.97
2916	BD+35° 1540		*9.04*	9.1	6 57 17.447	+ 3.9878	− .0099	+ .004	+35 14 59.78	−4.959	− .561	− .05	4	18.40
2917	BD+46° 1219		*8.85*	9.3	57 23.164	4.4245	− .0164	− .003	+46 14 12.59	4.967	.625	+ .01	4	18.60
2918	ω Geminorum	K0	5.21	5.38	57 32.369	3.6580	− .0062	− .0003	+24 19 50.42	4.980	.514	− .014	4	19.16
2919	BD− 6° 1885	K5	8.7	7.90	57 36.038	2.9178	− .0004	− .001	− 6 49 27.65	4.985	.410	+ .02	4	18.25
2920	Lac 2570	B3	5.80	5.80	57 48.653	2.4665	+ .0011	− .0018	−25 6 5.36	5.003	.347	+ .019	4	18.59
2921	BD−19° 1651	A3	8.6	8.5	6 57 59.271	+ 2.6250	+ .0008	− .0014	−19 5 8.18	−5.018	− .369	+ .011	5	18.47
2922	BD+11° 1418	K7	*9.29*	9.4	58 7.910	3.3371	− .0032	+ .001	+11 33 9.89	5.030	.471	+ .02	4	18.55
2923	BD+37° 1643	F8	*8.55*	8.36	58 15.711	4.0444	− .0110	− .006	+36 54 53.45	5.041	.569	− .12	5	19.11
2924	CD−27° 3539	A2	7.9	7.9	58 20.638	2.3924	+ .0012	− .0002	−27 44 39.09	5.048	.335	− .005	4	19.57
2925	22 Can Maj	K5	3.68	3.54	58 31.959	2.3904	+ .0012	− .0008	−27 49 10.14	5.064	.335	+ .001	4	18.52
2926	BD+55° 1164	A2	7.94	7.86	6 58 38.360	+ 4.9770	− .0270	.000	+55 49 39.21	−5.073	− .700	− .03	4	19.16
2927	Grmb 1256	K0	6.54	6.13	58 57.852	5.3041	− .0344	+ .0037	+59 55 18.27	5.101	.745	− .008	4	18.98
2928	ζ Geminorum	G0	Var.	4.05	59 21.884	3.5605	− .0054	− .0003	+20 41 19.96	5.135	.499	− .008	79 65	19.33 19.07
2929	BD+47° 1392		9.2		59 27.901	4.5005	− .0183	+ .002	+47 51 57.36	5.143	.632	.00	4	18.53
2930	BD+ 6° 1503	A2	8.3	8.42	59 35.741	3.2080	− .0023	− .003	+ 5 58 46.37	5.154	.450	.00	4	18.52
2931	BD+43° 1640		*9.54*		6 59 39.350	+ 4.3046	− .0151	− .002	+43 39 5.06	−5.159	− .604	− .02	4	18.38
2932	δ Can Maj	B5	3.12	3.4	59 41.022	2.5054	+ .0010	− .0005	−23 42 56.07	5.161	.350	− .006	4	18.79
2933	BD− 0° 1572	A0	8.5	8.71	6 59 43.507	3.0506	− .0013	+ .0008	− 0 58 51.39	5.165	.427	+ .003	5	17.85
2934	γ Can Maj	B5	4.07		7 0 8.340	2.7145	+ .0005	− .0001	−15 30 51.29	5.198	.380	− .014	4	18.63
2935	BD+32° 1475	A2	*9.49*		0 12.208	3.8794	− .0001	.000	+32 0 39.16	5.205	.544	− .05	4	18.34
2936	BD+40° 1788	A2	8.77	9.23	7 0 24.821	+ 4.1547	− .0130	+ .001	+39 59 1.61	−5.223	− .583	.00	5	18.37
2937	BD+20° 1695	A0	8.50	8.69	0 31.798	3.5408	− .0053	− .001	+19 56 43.52	5.233	.497	.00	4	18.06
2938	BD+61° 935	Mb	*8.49*	8.36	1 7.57	5.4338	− .0390	− .004	+61 21 59.94	5.283	.762	.00	4	18.10
2939	BD+28° 1310	A2	7.8	7.74	1 9.669	3.7672	− .0079	− .0016	+28 18 50.45	5.286	.527	− .002	5	18.68
2940	BD+17° 1491		*9.11*	9.1	1 12.526	3.4804	− .0048	− .001	+17 33 1.92	5.290	.487	− .01	4	18.91

2887. $11^{m}3$, $5''8$, 154°
2898. 13^{m}, $3''0$, 50°

2903. $7^{m}8$, $7''4$, 161°.
2906. 13^{m}, $1''9$, 12°.

2928. $3^{m}7$ to $4^{m}1$.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
2941	Lal 13773	K0	6.19	6.05	7 1 22.606	+2.5544	+0.0009	+0.0009	−21 54 35.08	−5.304	−0.357	−0.054	5	17.98
2942	BD+53° 1102	F8	*9.17*	8.91	1 23.605	4.8209	− .0252	+ .003	+53 36 15.10	5.306	.675	− .02	4	18.29
2943	BD+66° 482	A2	*9.25*		1 29.99	6.0928	− .0578	+ .0003	+66 53 39.19	5.315	.854	+ .041	4	18.43
2944	BD+68° 464	K0	*8.50*	8.34	1 43.88	6.3789	− .0672	− .0009	+68 42 47.51	5.334	.894	− .012	4	19.19
2945	BD−14° 1710	K0	8.1	7.63	1 54.418	2.7336	+ .0004	+ .0010	−14 44 58.53	5.349	.382	− .020	4	18.08
2946	BD− 4° 1815		9.3		7 1 58.744	+2.9734	− .0009	+ .0026	− 4 24 42.05	−5.355	− .416	− .020	4	19.35
2947	BD−12° 1777	B5	7.20	7.27	1 59.502	2.7828	+ .0002	− .0006	−12 41 22.19	5.356	.389	− .023	4	18.90
2948	CD−25° 4008	G5	9.5		1 59.807	2.4536	+ .0011	+ .0026	−25 40 32.90	5.357	.343	+ .004	4	17.77
2949	BD+44° 1584	G5	6.95	7.05	2 20.933	4.3229	− .0161	− .0001	+44 9 54.80	5.386	.605	− .022	5	19.17
2950	BD− 2° 1925	B9	7.4	7.04	2 27.265	3.0054	− .0011	− .0015	− 2 59 31.54	5.395	.420	− .010	4	18.86
2951	BD+10° 1416	F0	7.90	7.91	7 2 41.631	+3.2997	− .0033	.000	+10 0 15.25	−5.415	− .461	− .03	4	18.42
2952	BD+36° 1567	F8	*8.38*	8.42	2 42.818	4.0071	− .0114	− .0028	+35 59 17.48	5.417	.560	− .070	4	18.34
2953	Dorp (30) 818 *m.*	B3	5.28	5.61	2 55.299	2.8187	− .0001	− .0012	−11 10 11.19	5.434	.393	− .016	4	18.82
2954	Wi (2) 6^{h} 1775	K0	6.47	6.10	2 58.516	3.9389	− .0104	− .0001	+33 57 31.39	5.439	.551	− .034	4	18.64
2955	BD−16° 1769	A0	9.1		3 19.048	2.6889	+ .0005	+ .003	−16 37 18.93	5.468	.375	− .03	4	18.54
2956	Pulk (55) 1157	K0	5.92	5.49	7 3 29.985	+3.2442	− .0029	+ .0009	+ 7 35 52.01	−5.483	− .452	− .025	4	18.28
2957	51 H. Cephei	Ma	5.26		3 32.03	29.142	−2.990	− .049	+87 10 38.15	5.486	4.083	− .036	189 126	19.30 20.31
2958	CD−26° 3880	B3	6.38	6.6	3 45.536	2.4312	+ .0011	+ .0013	−26 31 54.13	5.505	.339	+ .029	4	19.15
2959	45 Geminorum *br.*	K0	5.58	5.6	3 46.773	3.4426	− .0047	− .0007	+16 3 34.94	5.507	.480	− .111	4	17.87
2960	BD+ 2° 1559	B8	*9.21*	9.4	3 48.658	3.1358	− .0021	− .0028	+ 2 48 44.57	5.509	.438	− .012	4	18.62
2961	BD+59° 1052	K0	*8.10*	8.06	7 3 57.072	+5.2536	− .0363	.000	+59 29 58.67	−5.521	− .734	− .06	4	18.44
2962	BD+57° 1041	K5	*9.08*		4 1.462	5.0468	− .0313	.000	+56 56 53.47	5.527	.704	.00	4	18.66
2963	BD+30° 1431	K0	7.41	7.20	4 13.373	3.8224	− .0091	+ .0022	+30 16 34.43	5.544	.533	− .051	5	17.53
2964	BD+25° 1590	A3	8.6	8.81	4 24.936	3.6821	− .0074	− .0005	+25 23 25.97	5.560	.514	− .012	4	18.78
2965	BD+14° 1576	A	*9.32*	9.1	4 25.015	3.4094	− .0043	− .001	+14 41 37.27	5.560	.476	+ .03	4	19.00
2966	Grmb 1262	K0	6.45	6.44	7 4 39.92	+7.0110	− .0940	+ .0051	+71 56 55.83	−5.581	− .979	+ .007	[illegible]	18.42
2967	CD−29° 3926	K2	7.9	8.06	4 42.780	2.3523	+ .0012	− .0003	−29 18 19.42	5.585	.327	− .038	5	18.43
2968	BD+46° 1234		*9.60*		4 48.518	4.4105	− .0184	.000	+46 11 32.54	5.593	.615	.00	4	19.17
2969	BD− 8° 1759		9.1	8.6	4 56.075	2.8869	− .0005	− .004	− 8 14 28.96	5.604	.401	− .02	4	19.05
2970	BD−18° 1698	K5	7.9	7.30	4 56.186	2.6440	+ .0005	− .0020	−18 28 32.84	5.604	.368	+ .020	4	18.47
2971	δ Can Maj	F8	1.98	2.68	7 5 8.311	+2.4397	+ .0011	− .0004	−26 15 55.70	−5.620	− .339	+ .002	18 19	23.53 23.46
2972	BD+28° 1326	K0	*9.35*	9.3	5 8.687	3.7697	− .0086	− .0014	+28 31 2.15	5.620	.525	+ .005	4	18.48
2973	BD− 6° 1948		8.7	8.8	5 21.648	2.9166	− .0006	− .001	− 6 56 28.90	5.640	.405	− .01	4	18.82
2974	BD+12° 1444	A	8.5	8.7	5 35.538	3.3611	− .0040	− .002	+12 40 41.52	5.659	.468	− .02	4	18.14
2975	BD+38° 1704	K0	7.9	7.90	5 44.300	4.0859	− .0131	.000	+38 19 35.44	5.671	.569	− .02	4	18.19
2976	BD−20° 1749	B8	8.7	8.8	7 5 52.948	+2.5880	+ .0008	− .001	−20 43 1.24	−5.683	− .360	.00	4	18.29
2977	63 Aurigæ	K2	5.07	5.00	6 9.284	4.1269	− .0139	+ .0041	+39 27 8.74	5.706	.574	− .003	4	17.91
2978	20 Monocerotis	K0	5.02	4.9	6 15.248	2.9806	− .0011	.0000	− 4 6 40.78	5.714	.414	+ .217	4	18.01
2979	BD+ 1° 1719	G0	*8.53*	8.83	6 17.358	3.1124	− .0020	− .0026	+ 1 46 30.59	5.717	.432	− .090	4	18.61
2980	BD+21° 1535	F5	*9.06*		6 19.482	3.5815	− .0064	− .001	+21 39 56.87	5.720	.498	− .02	4	18.07
2981	Brad 1034	A2	5.60	5.63	7 6 25.415	+3.7249	− .0080	− .0013	+26 59 21.02	−5.729	− .518	− .049	4	18.53
2982	Grmb 1272	Ma	5.69	5.48	7 9.345	4.6847	− .0246	+ .0020	+51 33 46.62	5.790	.651	+ .003	5	18.30
2983	Lal 13850	A5	6.62	6.8	7 15.175	4.4807	− .0206	− .0040	+47 44 34.63	5.798	.623	− .079	4 3	17.84 18.74
2984	Brad 1045	F0	5.40	6.04	7 18.290	3.0689	− .0018	− .0015	− 0 10 8.70	5.802	.426	− .004	4	17.94
2985	BD+62° 916	G0	*8.02*	7.84	7 35.23	5.5055	− .0454	− .005	+62 16 25.87	5.826	.765	− .07	4	18.10
2986	BD+18° 1524 *m.*		8.6	8.7	7 7 39.666	+3 5077	− .0058	− .002	+18 47 15.65	−5.834	− .486	− .02	4	18.01
2987	22 Monocerotis	A0	4.09	4.44	7 46.756	3.0647	− .0017	+ .0002	− 0 21 33.35	5.842	.425	+ .011	4	17.77
2988	BD+78° 243		*8.45*	8.68	7 48.24	9.0430	− .2029	− .0029	+77 54 53.48	5.844	1.259	− .049	5	17.77
2989	BD+25° 1609	A0	6.89	7.0	7 54.222	3.6929	− .0080	.0000	+25 53 0.41	5.853	.513	− .018	4	18.06
2990	CD−24° 4992		10.2		8 16.924	2.4967	+ .0010	− .0021	−24 16 13.60	5.884	.346	− .018	4	18.56
2991	BD− 9° 1901	A0	9.2		7 8 21.579	+2.8521	− .0004	+ .001	− 9 47 59.89	−5.891	− .396	− .02	4	18.27
2992	BD− 2° 1980	K2	8.1	7.82	8 22.742	3.0183	− .0014	− .0027	− 2 26 22.40	5.892	.419	+ .025	4	18.40
2993	BD+44° 1602		*9.47*	9.17	8 40.548	4.3247	− .0181	− .001	+44 26 16.24	5.917	.600	− .04	4	18.15
2994	51 Geminorum	Mb	5.31	5.26	8 46.695	3.4459	− .0052	+ .0008	+16 17 45.15	5.926	.477	− .050	4	17.87
2995	BD+39° 1893		9.4		8 47.563	4.1173	− .0144	− .001	+39 17 35.85	5.927	.570	.00	5	18.98
2996	BD+32° 1504	G0	*9.22*	9.3	7 9 2.082	+3.8957	− .0109	.000	+32 48 58.33	−5.947	− .540	− .09	4	18.49
2997	BD−12° 1842	B8	8.5	8.29	9 12.283	2.7958	− .0001	.0000	−12 14 36.43	5.961	.386	− .008	4	18.09
2998	BD+16° 1419	F2	7.4	7.51	9 16.727	3.4559	− .0053	+ .001	+16 43 3.40	5.968	.478	− .02	4	18.00
2999	BD+ 6° 1571	A0	9.0		9 25.490	3.2183	− .0030	+ .001	+ 6 30 35.89	5.980	.446	+ .02	4	21.61
3000	BD+82° 199		*9.15*		9 28.85	12.0967	− .4387	− .0043	+81 57 19.35	5.984	1.680	+ .006	5	18.31

2953. 5$^{\mathrm{m}}$1-8$^{\mathrm{m}}$0, 0″6, 126°.

2959. 11$^{\mathrm{m}}$, 5″8, 31°.

2986. 9$^{\mathrm{m}}$1-9$^{\mathrm{m}}$1, 1″1, 186°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3001	BD+61° 951		*9.72*	9.5	7 9 37.46	+ 5.4233	−0.0445	+0.001	+61 31 13.46	−5.996	−0.752	+0.02	4	18.44
3002	BD− 4° 1862	*	7.50	7.22	9 47.737	2.9608	− .0011	+ .0001	− 5 1 6.01	6.011	.409	− .009	4	18.54
3003	BD+ 4° 1627	G5	7.60	7.38	9 49.048	3.1779	− .0027	− .0005	+ 4 42 57.38	6.013	.440	− .017	4	18.58
3004	Bo VI+12° 1469	K0	5.84	6.04	10 5.070	3.3495	− .0044	− .0041	+12 15 15.93	6.035	.463	− .012	4	18.27
3005	BD+ 7° 1648		*9.89*		10 15.474	3.2489	− .0034	− .003	+ 7 52 28.89	6.049	.449	− .03	4	18.77
3006	BD+23° 1648	K0	8.4	8.53	7 10 21.616	+ 3.6233	− .0074	− .001	+23 22 37.70	−6.058	− .501	.00	4	17.83
3007	CD−27° 3789	B3	5.86	5.9	10 23.024	2.4175	+ .0010	− .0010	−27 13 8.06	6.060	.333	− .004	4	18.16
3008	BD+73° 368		*9.07*	9.4	10 23.48	7.4285	− .1221	− .0025	+73 41 56.75	6.060	1.029	+ .002	4	18.64
3009	BD+58° 1017	F0	7.36	7.35	10 31.432	5.1261	− .0368	− .003	+58 11 29.76	6.071	.710	− .03	4	18.88
3010	BD+20° 1751	B9	7.50	7.7	11 0.174	3.5356	− .0064	+ .001	+19 59 15.38	6.111	.489	− .01	4	18.38
3011	BD−22° 1764	G5	8.5	8.20	7 11 8.012	+ 2.5377	+ .0008	+ .0008	−22 48 11.95	−6.122	− .350	− .036	4	19.19
3012	BD+35° 1584	G5	*8.56*	8.24	11 9.032	3.9689	− .0125	− .012	+35 9 28.82	6.124	.549	+ .02	5	17.95
3013	BD+ 0° 1871 *br.*	G5	6.52	6.3	11 13.731	3.0722	− .0020	− .0011	− 0 1 17.18	6.130	.424	− .006	4	17.88
3014	BD+48° 1500	A2	*7.93*	7.40	11 17.250	4.5161	− .0227	.000	+48 36 24.56	6.135	.624	− .01	4	18.16
3015	BD+15° 1520	K5	8.34	8.28	11 19.403	3.4124	− .0050	− .001	+14 56 59.62	6.138	.472	− .04	4	17.92
3016	BD−14° 1790	K0	7.16	7.32	7 11 29.254	+ 2.7445	.0000	− .0020	−14 28 9.77	−6.152	− .378	+ .006	4	18.31
3017	BD+51° 1307	A0	*8.80*	8.01	11 31.078	4.6886	− .0265	+ .001	+51 47 40.44	6.154	.648	− .02	4	18.38
3018	64 Aurigæ	A3	5.75	5.70	12 28.604	4.1778	− .0161	− .0010	+41 1 36.20	6.234	.576	.000	5	18.78
3019	BD−16° 1857	B9	8.9		12 32.220	2.6939	+ .0003	+ .0012	−16 36 28.78	6.239	.371	+ .015	4	18.98
3020	BD+56° 1200	K2	*8.88*	8.95	12 54.005	4.9702	− .0341	− .007	+56 13 11.87	6.269	.686	− .03	5	17.84
3021	BD+24° 1599	A0	8.4	8.6	7 12 54.696	+ 3.6558	− .0082	+ .0007	+24 40 18.72	−6.270	− .504	− .003	4	17.89
3022	BD+42° 1693		8.9		13 1.644	4.2232	− .0173	− .007	+42 11 40.03	6.279	.582	− .03	4	18.58
3023	BD−20° 1824		9.5		13 15.525	2.5905	+ .0006	+ .0024	−20 48 42.64	6.299	.356	− .040	5	19.28
3024	BD− 7° 1855	G5	8.9	8.9	13 18.576	2.8921	− .0008	− .009	− 8 6 13.99	6.303	.398	+ .07	4	18.75
3025	λ Geminorum	A2	3.65	3.66	13 29.771	3.4529	− .0058	− .0033	+16 41 8.98	6.319	.475	− .048	78 45	18.93 19.23
3026	BD+38° 1732		9.1		7 13 36.422	+ 4.0712	− .0146	+ .005	+38 13 8.68	−6.328	− .560	− .02	4	19.06
3027	Wi (1) 7^h 312	K2	6.36	6.23	13 37.611	2.9274	− .0010	− .0029	− 6 32 9.22	6.330	.401	+ .004	4	19.27
3028	BD+28° 1361	F0	*9.45*	9.5	13 42.770	3.7507	− .0095	+ .0063	+28 8 14.61	6.337	.519	− .013	4	19.08
3029	BD−18° 1766	K2	8.5	8.6	13 48.022	2.6579	+ .0004	− .0004	−18 7 10.07	6.345	.365	+ .008	4	18.33
3030	BD+13° 1625		*9.32*		13 54.001	3.3706	− .0048	− .002	+13 13 31.83	6.354	.464	+ .02	4	19.05
3031	25 H Camelop.	Mb	5.11		7 14 19.93	+12.7853	− .5404	+ .0025	+82 34 10.92	−6.388	−1.763	− .045	171 136	21.01 21.04
3032	BD−10° 1971	B9	8.5	8.51	14 21.264	2.8376	− .0005	.0000	−10 30 49.17	6.390	.389	+ .005	4	18.25
3033	BD+ 8° 1735	K0	7.4	7.22	14 25.123	3.2650	− .0038	− .003	+ 8 38 1.14	6.395	.448	− .01	4	18.71
3034	BD+60° 1046	F5	*7.74*	7.36	14 52.65	5.3076	− .0445	− .001	+60 28 36.39	6.433	.730	− .08	4	17.98
3035	Wi (1) 7^h 350	G5	6.06	6.03	15 11.520	3.1365	− .0027	− .0006	+ 2 53 17.74	6.459	.431	− .024	4	18.57
3036	BD− 0° 1677	G0	7.78	7.84	7 15 13.679	+ 3.0686	− .0021	− .0013	− 0 11 12.05	−6.462	− .421	+ .020	4	18.28
3037	δ Geminorum *br.*	F0	3.52	3.59	15 20.776	3.5871	− .0076	− .0013	+22 7 50.85	6.472	.492	− .017	66 55	18.45 18.90
3038	BD−12° 1898	B9	8.9	8.4	15 39.596	2.7957	− .0002	+ .0038	−12 21 31.61	6.498	.384	− .012	4	18.72
3039	BD+ 4° 1665	K0	*7.81*	7.96	15 49.947	3.1594	− .0029	+ .0005	+ 3 55 31.82	6.512	.433	− .036	5	18.04
3040	*R* Can Maj	F0	Var.	6.14	15 50.903	2.7045	+ .0002	+ .0128	−16 14 38.94	6.514	.370	− .104	4	18.50
3041	BD+31° 1544	F2	*9.15*		7 16 6.742	+ 3.8549	− .0116	− .0006	+31 45 50.22	−6.535	− .529	− .012	4	18.28
3042	19^1 Lyncis *s.f.*	B8	5.61	5.75	16 20.709	4.9056	− .0341	+ .0002	+55 26 1.65	6.555	.673	− .038	5	18.57
3043	CD−27° 3929		10.2		16 31.227	2.4095	+ .0010	− .005	−27 42 39.77	6.569	.329	− .11	5 4	18.49 19.33
3044	BD+45° 1423	K0	*8.70*	8.83	16 31.904	4.3720	− .0215	− .005	+45 49 17.49	6.570	.598	− .01	4	19.03
3045	BD+10° 1505 *br.*	A0	7.76	7.89	16 36.492	3.3032	− .0043	− .002	+10 20 46.26	6.577	.452	.00	4	18.69
3046	Brad 1063	K0	5.21	5.35	7 16 42.030	+ 4.0208	− .0145	− .0066	+36 54 44.30	−6.584	− .551	− .041	4	18.71
3047	BD− 2° 2066	K5	9.1	8.5	17 5.755	3.0232	− .0018	− .0016	2 14 46.33	6.617	.413	+ .001	4	19.33
3048	BD+19° 1699		8.7	9.1	17 11.437	3.5154	− .0068	.000	+19 20 30.80	6.624	.481	− .04	4	19.14
3049	BD+69° 420	F8	*8.70*	9.1	17 11.89	6.4659	− .0889	+ .0052	+69 36 35.16	6.625	.886	− .004	4	19.19
3050	BD+29° 1516	F5	8.5	8.67	17 12.762	3.7921	− .0107	+ .0005	+29 41 59.26	6.626	.519	+ .006	4	18.94
3051	Brad 1065	K2	5.16	5.26	7 17 13.720	+ 3.5467	− .0072	− .0043	+20 35 44.89	−6.628	− .485	− .033	4	19.51
3052	BD+54° 1137	B9	*8.45*	8.30	17 16.763	4.8242	− .0323	.000	+54 14 43.92	6.632	.661	− .03	4	19.06
3053	BD−13° 1963	A2	8.9	8.7	17 34.365	2.7605	− .0001	− .001	−13 54 48.38	6.656	.376	− .04	4	18.26
3054	Lac 2747 *br*	B3	5.84	6.86	17 40.062	2.4357	+ .0010	+ .0008	−26 48 47.17	6.664	.332	+ .016	4	18.40
3055	BD+44° 1620		*9.74*		17 44.864	4.3112	− .0204	+ .003	+44 30 5.60	6.670	.590	− .01	4	18.94
3056	BD+ 1° 1781	A0	*8.84*	8.91	7 17 45.772	+ 3.1101	− .0026	+ .0009	+ 1 41 55.85	−6.672	− .425	− .016	4	18.07
3057	BD− 3° 1865 *s pr*		8.9		18 6.595	2.9874	− .0016	− .0036	− 3 52 23.65	6.700	.407	− .009	4	18.33
3058	BD+34° 1594		*9.41*		18 11.148	3.9406	− .0135	+ .003	+34 45 23.92	6.707	.540	− .04	4	18.47
3059	BD+64° 631		*8.72*	8.9	18 13.28	5.7117	− .0604	+ .0028	+64 29 26.59	6.709	.782	+ .027	4	18.06
3060	BD+52° 1204	K5	*8.82*	8.2	18 35.065	4.7162	− .0300	+ .001	+52 33 20.49	6.739	.644	− .02	4	18.07

3002. A0, G5.
3013. 11^m8, 3″9, 310°.

3037. 8^m5, 6″8, 211°.
3040. 5^m5 to 6^m4.

3042. 6^m53, 15″, 315°.
3045. 9^m5, 8″8, 67°.

3054. 12^m3, 8″5, 218°.
3057. 9^m3, 8″0, 42°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3061	66 Aurigæ	K0	5.28	5.28	7 18 36.232	+4.1601	−0.0176	+0.0001	+40 49 39.70	−6.741	−0.567	−0.024	5	19.42
3062	BD+17° 1562		*9.05*	8.79	18 40.917	3.4634	− .0064	− .002	+17 14 54.82	6.747	.473	+ .04	4	18.29
3063	CD−24° 5279	K2	7.40	6.77	19 4.091	2.4929	+ .0009	− .0015	−24 45 1.04	6.779	.339	− .003	4	18.32
3064	BD+46° 1264		9.0	9.4	19 11.288	4.3868	− .0225	− .028	+46 15 46.56	6.789	.599	− .34	4	18.05
3065	BD+49° 1621	K0	7.92	7.65	19 13.828	4.5612	− .0266	− .001	+49 48 48.33	6.793	.623	− .03	4	18.61
3066	BD+33° 1520	K0	*8.47*	8.85	7 19 16.793	+3.8952	− .0128	+ .001	+33 11 43.10	−6.797	− .532	− .01	4	18.73
3067	BD+23° 1704	F5	*8.20*	8.38	19 36.492	3.6083	− .0084	− .004	+23 5 5.95	6.824	.491	− .07	4	18.52
3068	BD+87° 53		*9.17*		19 43.06	26.294	−3.041	− .005	+86 54 11.71	6.833	3.601	+ .025	4	17.62
3069	BD− 5° 2096		9.3		20 15.218	2.9437	− .0013	.000	− 5 52 3.93	6.877	.400	− .08	4	18.14
3070	BD+63° 710	K0	*8.30*	8.48	20 21.66	5.5525	− .0563	− .003	+63 9 20.93	6.886	.757	− .04	4	17.92
3071	BD+39° 1935		9.8		7 20 29.296	+4.1086	− .0170	.000	+39 32 31.41	−6.897	− .559	+ .04	5	18.38
3072	BD+11° 1578	A2	5.34	5.81	20 31.578	3.3355	− .0049	− .004	+11 49 37.74	6.899	.454	− .04	4	18.23
3073	Rad (45) 1928	G0	7.40	7.32	20 40.12	9.4394	− .2738	− .0117	+78 51 14.15	6.911	1.289	− .090	10	18.90
3074	BD+53° 1144	F8	*8.64*	8.63	20 42.477	4.7598	− .0321	+ .007	+53 22 12.27	6.914	.648	− .05	5	17.58
3075	BD−21° 1918	A0	8.7	8.5	20 42.694	2.5780	+ .0006	+ .0022	−21 26 42.93	6.914	.350	− .008	4	18.28
3076	ι Geminorum	K0	3.89	3.75	7 20 45.579	+3.7384	− .0105	− .0086	+27 57 29.64	−6.918	− .508	− .090	92 51	19.07 19.43
3077	η Can Maj	B5	2.43	3.04	20 55.842	2.3735	+ .0011	− .0007	−29 8 47.03	6.932	.323	+ .004	4	18.75
3078	BD+37° 1717	K0	*9.06*	9.3	20 59.817	4.0235	− .0154	+ .003	+37 10 34.51	6.938	.548	.00	4	17.77
3079	BD−17° 1960	A3	9.1		21 1.626	2.6672	+ .0003	− .0012	−17 55 21.33	6.940	.361	− .020	4	18.10
3080	BD− 7° 1941	F0	8.0	8.2	21 3.788	2.9089	− .0011	.000	− 7 26 45.36	6.943	.395	+ .01	4	18.01
3081	BD+ 5° 1652	K5	8.16	7.62	7 21 12.420	+3.1826	− .0034	− .0008	+ 5 0 31.98	−6.955	− .432	+ .004	5	17.93
3082	Lal 14451	F0	5.82	5.97	21 27.900	2.7698	− .0002	− .0140	−13 35 37.15	6.976	.375	+ .005	4 5	18.56 17.61
3083	BD− 9° 2037	B9	8.6	8.7	22 6.255	2.8564	− .0008	+ .001	− 9 48 30.95	7.029	.388	+ .01	4	18.24
3084	143 B Camelop	K0	5.80	5.43	22 34.18	6.2688	− .0866	− .0005	+68 37 51.99	7.067	.852	− .044	14	18.98
3085	Lac 2802	B5	6.20		22 38.693	2.3041	+ .0011	+ .0001	−31 34 44.31	7.073	.311	+ .005	4	19.25
3086	δ Can Min	B8	3.09	3.23	7 22 48.780	+3.2585	− .0043	− .0034	+ 8 27 5.75	−7.086	− .441	− .043	82 71	19.04 19.00
3087	BD+51° 1321	M0	*8.92*		22 55.006	4.6114	− .0291	+ .002	+50 54 47.94	7.095	.625	− .01	4	18.35
3088	BD+42° 1717		9.2	8.6	23 1.364	4.2024	− .0195	+ .002	+42 6 54.14	7.104	.570	− .05	4	18.11
3089	BD−19° 1885	K0	8.7	8.5	23 1.452	2.6219	+ .0005	− .0022	−19 50 18.04	7.104	.354	+ .009	4	17.86
3090	CD−27° 4072		9.7		23 8.368	2.4268	+ .0010	+ .0011	−27 20 15.91	7.113	.328	− .005	4	19.17
3091	BD+57° 1080	G0	*8.17*	8.51	7 23 13.144	+5.0064	− .0404	− .002	+57 8 11.73	−7.120	− .679	− .01	4	18.62
3092	Paris 9170	B2	5.48	6.03	23 35.904	2.5447	+ .0007	+ .0002	−22 55 26.89	7.151	.343	+ .007	4	18.50
3093	BD+13° 1677		*9.48*		23 36.822	3.3667	− .0056	+ .001	+13 15 0.50	7.152	.455	− .03	4	18.20
3094	BD+21° 1606	G5	7.07	6.88	23 40.155	3.5698	− .0083	− .009	+21 42 47.67	7.157	.483	− .03	4	18.24
3095	γ Can Min	K0	4.60	4.74	23 48.468	3.2724	− .0045	− .0043	+ 9 5 18.46	7.168	.442	+ .008	4	18.84
3096	BD+24° 1665	F8	7.41	7.25	7 23 48.835	+3.6497	− .0095	+ .0014	+24 48 49.89	−7.168	− .493	− .091	4	18.81
3097	BD+ 6° 1677		8.5	8.79	23 52.579	3.2153	− .0039	.000	+ 6 31 1.83	7.173	.435	− .02	4	18.80
3098	ρ Geminorum ...... *br.*	F0	4.18	4.27	23 58.048	3.8507	− .0129	+ .0117	+31 56 41.09	7.181	.521	+ .183	4	18.87
3099	CD−24° 5426	A0	8.0	8.09	24 11.578	2.4942	+ .0009	− .0010	−24 53 6.90	7.199	.336	− .035	4	17.94
3100	Brad 1082	K0	5.09	5.12	24 50.279	3.7374	− .0110	− .0021	+28 4 56.31	7.252	.505	− .040	4	17.95
3101	BD+18° 1636	F2	8.7	9.4	7 24 51.986	+3.4835	− .0073	.000	+18 14 59.71	−7.254	− .470	− .03	4	18.79
3102	BD+67° 493	K5	7.61	7.47	24 59.73	6.0222	− .0786	− .0029	+67 6 24.19	7.265	.815	− .030	4	18.84
3103	BD+41° 1673		9.2		25 7.788	4.1526	− .0189	− .004	+40 56 1.41	7.276	.562	− .03	4	18.54
3104	BD− 1° 1736		9.0		25 12.161	3.0362	− .0023	− .0046	− 1 40 43.61	7.282	.409	− .078	4	18.03
3105	BD−12° 1989	A0	9.0		25 18.896	2.8039	− .0005	.0000	−12 11 11.99	7.291	.377	+ .010	4	18.07
3106	6 Can Min	K0	4.85	4.76	7 25 20.665	+3.3412	− .0055	+ .0002	+12 10 23.10	−7.293	− .451	− .019	4 5	18.98 17.95
3107	BD+72° 367 ...... *br.*	F8	*8.85*	8.4	25 30.26	7.0477	− .1290	− .0087	+72 36 59.42	7.306	.953	− .055	4	17.67
3108	BD+15° 1583		*8.59*	8.66	25 30.439	3.4089	− .0062	− .001	+15 7 4.23	7.306	.459	− .04	4	18.28
3109	BD+ 3° 1697		*9.57*		25 35.283	3.1362	− .0032	− .0001	+ 2 55 11.55	7.313	.423	− .028	5	18.17
3110	BD−15° 1851	A5	8.7		25 35.330	2.7163	.0000	− .0010	−15 59 4.47	7.313	.365	− .019	4	18.24
3111	BD+26° 1573 ...... *m.*	F0	*9.5*	9.5	7 25 36.424	+3.6780	− .0102	+ .0023	+25 56 38.29	−7.315	− .496	− .022	4	18.85
3112	BD+62° 935		*7.94*	7.99	25 39.56	5.4912	− .0582	− .004	+62 46 40.06	7.319	.742	− .03	4	18.35
3113	BD+54° 1149	A7	*9.30*	9.36	25 40.778	4.7771	− .0348	+ .001	+53 52 28.78	7.320	.645	− .01	9 8	18.55 17.88
3114	BD− 3° 1920	G5	9.1	8.8	26 1.426	2.9947	− .0019	− .0019	− 3 35 30.69	7.349	.402	+ .009	4	18.02
3115	BD+21° 1618	K0	*9.33*		26 20.448	3.5526	− .0083	− .002	+21 7 3.96	7.374	.478	− .03	4	18.81
3116	BD+ 9° 1680	K5	8.92	8.69	7 26 27.529	+3.2866	− .0048	− .001	+ 9 46 13.13	−7.384	− .442	+ .02	4	18.34
3117	BD+ 4° 1723	G5	*8.16*	8.45	26 30.056	3.1632	− .0035	− .0015	+ 4 9 59.51	7.389	.426	− .014	4	18.99
3118	BD+45° 1444	A5	8.67	8.57	26 48.855	4.3096	− .0230	− .001	+44 53 23.63	7.413	.580	− .04	4	18.96
3119	BD+ 0° 1971	A0	*7.97*	8.06	26 51.152	3.0797	− .0027	+ .0006	+ 0 19 26.70	7.416	.416	+ .013	4	18.62
3120	Wi (1) 7^h 733	K0	6.38	6.55	26 54.152	2.9628	− .0016	− .0009	− 5 3 29.33	7.420	.399	− .008	4	17.85

3098. $12^{m}5$, $2''8$, 11°.

3107. $11^{m}0$, $1''6$, 202°.

3111. $10^{m}2$-$10^{m}3$, $1''9$, 172°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3121	BD+31° 1603		9.0	9.5	7 26 57.022	+ 3.8215	−0.0126	+0.0014	+31 5 56.41	−7.424	−0.516	−0.017	4	18.49
3122	BD+35° 1637		9.4	[illegible]	27 6.520	3.9578	− .0155	+ .002	+35 29 47.63	7.437	.532	− .02	5	19.27
3123	Pulk (55) 1217	K0	5.64	5.58	27 11.706	3.4582	− .0071	+ .0026	+17 15 26.41	7.444	.466	− .081	5 4	18.96 17.91
3124	CD−26° 4464 *br*		9.5		27 15.237	2.4458	+ .0010	+ .0014	−26 48 25.59	7.448	.328	− .013	4	24.11
3125	BD−17° 2014	A0	9.1		27 34.108	2.6736	+ .0002	+ .002	−17 50 22.83	7.474	.359	− .03	4	17.87
3126	BD+59° 1091		*10.05*		7 27 56.422	+ 5.1957	− .0492	− .002	+59 43 42.79	−7.504	− .699	+ .03	4	17.87
3127	BD+26° 1587	G5	*8.6*	8.6	28 2.690	3.6950	− .0108	+ .0011	+26 40 2.45	7.513	.496	− .014	4	18.06
3128	BD+22° 1717	K7	9.4		28 15.521	3.5915	− .0091	− .001	+22 43 40.26	7.530	.482	.00	4	18.31
3129	BD+60° 1063	G5	*8.23*	8.2	28 29.45	5.2892	− .0528	− .005	+60 48 56.89	7.549	.711	.00	4	18.06
3130	BD+48° 1548	A3	7.17	7.37	28 39.968	4.4649	− .0275	− .002	+48 21 53.39	7.563	.600	− .01	4	18.43
3131	BD+80° 233	F8	8.47	8.41	7 28 44.77	+10.6593	− .4164	+ .0170	+80 44 10.99	−7.570	−1.436	+ .011	4	18.04
3132	BD− 9° 2096	B8	7.51	7.85	28 52.630	2.8658	− .0010	− .001	− 9 29 50.66	7.580	.384	+ .01	4	16.76
3133	BD+11° 1607	Ma	*7.19*	7.14	29 2.364	3.3173	− .0055	− .006	+11 11 5.23	7.593	.445	.00	4	17.39
3134	BD+ 1° 1842	G5	8.29	8.45	29 4.242	3.0949	− .0029	+ .0001	+ 1 1 38.49	7.596	.414	+ .017	4	17.87
3135	BD+ 7° 1761		9.7		29 18.921	3.2406	− .0045	− .002	+ 7 43 57.16	7.616	.434	.00	4	17.93
3136	α² Geminorum *n. f.*	A0	1.99	2.52	7 29 29.809	+ 3.8469	− .0138	− .0135	+32 3 55.08	−7.629	− .514	− .110	26	[illegible]
3137	CD−29° 4560	K5	8.9	8.2	30 11.779	2.3702	+ .0011	− .0012	−29 39 0.11	7.687	.316	.000	4	18.34
3138	BD−10° 2104	A0	8.5		30 16.220	2.8357	− .0008	.0000	−10 52 23.17	7.693	.378	.000	4	18.43
3139	BD+83° 191	K0	7.99	7.79	30 27.13	13.5047	− .7637	+ .0084	+83 15 21.19	7.707	1.814	− .008	4	17.86
3140	BD+38° 1790		*9.21*	8.6	30 27.202	4.0461	− .0179	− .001	+38 16 35.81	7.708	.541	− .03	4	17.39
3141	108 G Puppis	F8	4.52	4.4	7 30 37.682	+ 2.5714	+ .0006	− .0048	−22 7 20.78	−7.722	− .343	+ .045	4	19.08
3142	CD−28° 4522	F0	6.61	6.98	30 40.038	2.4061	+ .0010	− .0014	−28 23 37.24	7.725	.320	+ .014	4	17.78
3143	Rad (45) 1986	K5	5.80	5.63	30 43.393	4.3656	− .0256	− .0009	+46 21 28.54	7.730	.584	− .046	4	17.99
3144	BD+20° 1846	A	8.80	9.1	30 45.086	3.5218	− .0084	− .001	+20 0 51.32	7.732	.470	− .01	4	17.86
3145	BD+61° 983	F5	7.17	7.14	30 57.27	5.3628	− .0572	.000	+61 42 40.77	7.748	.718	+ .03	4	18.04
3146	υ Geminorum	K5	4.22	3.83	7 30 59.688	+ 3.7027	− .0113	− .0020	+27 4 29.64	−7.751	− .494	− .116	4	19.21
3147	BD+71° 411		*8.90*		31 30.01	6.8300	− .1264	− .0019	+71 51 22.96	7.792	.914	− .028	4	18.52
3148	BD+30° 1533	F2	8.21	7.93	31 36.869	3.7823	− .0129	+ .0002	+29 57 33.98	7.801	.504	− .039	4	18.42
3149	BD−13° 2111	K0	8.6	8.20	31 54.431	2.7740	− .0004	− .0008	−13 38 47.37	7.825	.369	+ .004	5	17.81
3150	BD+49° 1655		*9.58*		32 20.186	4.5279	− .0304	+ .004	+49 48 32.43	7.859	.604	− .01	4	17.86
3151	Wi (1) 7ʰ 901	K2	6.43	6.05	7 32 24.693	+ 2.8970	− .0013	+ .0017	− 8 7 59.57	−7.865	− .386	+ .017	4	18.12
3152	BD+43° 1716		*9.56*		32 34.456	4.2493	− .0232	− .014	+43 45 24.26	7.878	.566	− .15	4	18.92
3153	BD−21° 2032	G5	7.9	7.69	32 45.732	2.5829	+ .0006	− .0009	−21 44 20.04	7.892	.343	+ .033	4	18.73
3154	BD+28° 1426	A0	*8.30*	8.07	32 49.370	3.7235	− .0120	− .0001	+27 55 8.52	7.898	.496	− .011	4	17.83
3155	BD+76° 290		*8.65*	8.9	32 51.76	8.0542	− .2076	− .0067	+76 9 1.50	7.902	1.076	− .040	5	18.08
3156	BD+39° 1980		*9.23*	8.6	7 32 52.277	+ 4.0924	− .0195	+ .001	+39 42 7.49	−7.902	− .546	− .02	5	19.11
3157	Grmb 1336	B9	6.59	6.76	32 52.340	4.7681	− .0378	− .0029	+54 5 0.87	7.902	.636	− .086	4 5	18.19 18.79
3158	Paris 9396	B3	5.66	5.88	33 10.070	2.6375	+ .0004	− .0009	−19 31 23.35	7.926	.349	+ .009	4	18.82
3159	Lal 14805	G5	6.91	7.12	33 10.669	3.8811	− .0151	− .0030	+33 22 4.99	7.927	.517	− .012	4	18.18
3160	25 Monocerotis	F5	5.17	5.07	33 18.053	2.9884	− .0021	− .0047	− 3 55 53.25	7.937	.396	+ .018	83 69	19.14 18.94
3161	Wi (1) 7ʰ 907	B9	[illegible]	7.0	7 33 20.210	+ 3.3838	− .0066	+ .0008	+14 13 28.25	−7.940	− .450	− .105	4	18.27
3162	CD−23° 5780	B5	9.2	8.24	33 21.647	2.5282	+ .0008	− .0022	−23 55 43.77	7.942	.335	+ .008	4	18.87
3163	BD+ 6° 1735	G5	9.0	8.9	33 21.740	3.2162	− .0044	− .005	+ 6 40 20.08	7.942	.427	.00	4	18.30
3164	BD− 1° 1779	K5	7.7	7.13	33 26.425	3.0329	− .0024	− .0006	− 1 51 23.69	7.948	.402	− .014	4	18.27
3165	BD+13° 1721		*9.13*	8.3	33 32.620	3.3555	− .0062	− .002	+12 58 56.65	7.956	.445	+ .02	4	19.13
3166	BD+ 4° 1763	K0	9.05	8.90	7 33 35.647	+ 3.1740	− .0040	− .0030	+ 4 43 14.20	−7.960	− .421	− .014	4	18.38
3167	CD−25° 4788	A0	10.0		33 48.040	2.4813	+ .0009	+ .0011	−25 45 9.00	7.977	.329	− .007	4	18.92
3168	BD− 2° 2208	A3	8.4	9.1	33 54.109	3.0064	− .0022	− .0006	− 3 5 48.90	7.985	.399	+ .011	4	19.33
3169	ο Geminorum	F0	4.92	5.1	33 56.760	3.9236	− .0162	− .0022	+34 46 8.67	7.989	.522	− .122	4	18.97
3170	Brad 1093	K0	6.20	6.05	34 12.930	4.9784	− .0453	− .0008	+57 16 0.95	8.010	.662	− .017	4	18.54
3171	*f* Puppis	B8	4.62		7 34 24.481	+ 2.2220	+ .0012	− .0029	−34 47 16.50	−8.026	− .293	+ .014	4	19.05
3172	BD+29° 1570	F2	*9.52*		34 31.557	3.7723	− .0132	− .0028	+29 44 35.63	8.035	.501	− .046	4	18.99
3173	BD+47° 1472		8.8	7.85	34 32.953	4.4203	− .0282	− .001	+47 44 7.59	8.037	.586	+ .01	4	18.89
3174	BD+70° 471	K0	8.29	7.62	34 39.32	6.4120	− .1080	− .0014	+69 52 13.54	8.045	.853	− .060	4	18.44
3175	BD+ 2° 1727	B9	9.0		34 53.924	3.1234	− .0035	− .0037	+ 2 22 19.23	8.065	.413	+ .009	4	18.28
3176	α Can Min *br.*	F5	0.48	[illegible]	7 35 6.731	+ 3.1890	− .0042	− .0467	+ 5 25 49.48	−8.082	− .422	−1.029	25	22.87
3177	BD− 7° 2108	A0	8.9		35 10.319	2.9553	− .0018	− .0021	− 5 29 12.26	8.087	.392	+ .007	4	17.94
3178	BD+ 8° 1842	G5	8.69	9.25	35 32.698	3.2619	− .0051	− .003	+ 8 48 7.00	8.117	.431	− .01	4	17.94
3179	BD−15° 1962	K2	9.4		35 44.577	2.7289	− .0002	+ .0010	−15 43 21.00	8.132	.360	− .005	4	18.72
3180	BD−17° 2081	A0	7.4	7.4	36 3.218	2.6834	+ .0001	− .0026	−17 41 12.40	8.157	.354	− .008	4	18.11

3124. 11m1, 1″8, 170°.

3136. 2m85, 5″0, 216°, for c. g. add −s089, −1″66 (1922.68); p. m. is for c. g.

3176. 13m, 1″4, 141°; 39 yrs.; for c. g. add +s020, −0″55 (1922.87); p. m. is for c. g.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3181	Wi (2) 7^{h} 955	K5	6.18	5.51	7 36 11.231	+3.5959	−0.0102	−0.0022	+23 12 16.64	−8.168	−0.476	−0.026	4	18.14
3182	BD+25° 1738	F8	*7.50*	7.30	36 11.978	3.6457	− .0111	− .0019	+25 9 6.49	8.169	.483	− .066	4	18.40
3183	BD+52° 1238	G5	*8.16*	8.26	36 12.882	4.6630	− .0360	− .001	+52 29 54.59	8.170	.617	− .10	4	18.58
3184	24 Lyncis	A2	4.96	5.6	36 14.813	5.0954	− .0506	− .0039	+58 53 56.85	8.173	.675	− .061	4	18.22
3185	BD+30° 1546		*8.92*	8.88	36 15.173	3.7984	− .0138	+ .0004	+30 44 29.67	8.173	.502	− .028	5	18.12
3186	BD+58° 1056	F	*9.90*		7 36 28.564	+5.0297	− .0484	− .003	+58 4 0.34	−8.191	− .666	− .02	4	18.40
3187	BD−11° 2054	K2	6.61	6.34	36 35.232	2.8231	− .0007	.0000	−11 34 0.20	8.200	.372	− .016	4	18.11
3188	BD+ 5° 1747		8.7	9.22	36 37.214	3.1876	− .0043	+ .0002	+ 5 22 56.95	8.203	.420	− .005	4	18.56
3189	BD+10° 1593	G5	9.0	8.61	36 41.719	3.2946	− .0057	− .001	+10 18 50.92	8.209	.434	.00	5 6	18.25 18.73
3190	BD+34° 1654		*9.56*		36 44.276	3.8961	− .0160	+ .001	+34 2 4.86	8.212	.514	+ .04	4	18.28
3191	BD+73° 384		*9.00*	8.8	7 36 49.51	+7.1886	− .1568	+ .0056	+73 30 15.67	−8.219	− .952	+ .028	4	19.09
3192	BD+18° 1711	A0	*8.83*	8.69	36 50.929	3.4792	− .0084	− .002	+18 26 34.75	8.221	.459	− .02	4	18.25
3193	BD+45° 1471	G	8.9		36 51.352	4.2976	− .0257	.000	+45 8 37.29	8.221	.568	− .04	4	18.36
3194	BD+85° 115		*9.02*		36 52.20	19.571	−1.955	− .0072	+85 46 30.36	8.223	2.600	+ .014	4	19.05
3195	BD− 6° 2235	F0	8.1	7.90	36 58.425	2.9208	− .0016	− .001	− 7 6 20.92	8.231	.385	+ .02	4	18.35
3196	BD+15° 1627	K0	7.5	7.78	7 37 14.189	+3.4166	− .0074	− .002	+15 46 12.46	−8.252	− .450	+ .01	4	18.49
3197	26 Monocerotis	K0	4.07	4.2	37 25.498	2.8720	− .0012	− .0051	− 9 21 49.03	8.267	.378	− .024	4	19.34
3198	BD+36° 1670	F5	*8.39*	8.80	37 29.918	3.9832	− .0181	+ .0029	+36 47 47.96	8.273	.526	− .087	5 4	17.25 18.08
3199	BD+21° 1668	G5	*7.97*	8.02	37 32.248	3.5440	− .0095	− .0020	+21 9 54.59	8.276	.467	− .057	5 4	17.66 18.27
3200	BD− 9° 2183	K2	8.5	8.61	38 49.256	2.8726	− .0012	− .001	− 9 21 27.31	8.378	.377	− .01	4	17.77
3201	BD−19° 2018	K2	8.7	7.7	7 38 57.847	+2.6494	+ .0002	.0000	−19 13 47.02	−8.389	− .348	+ .032	4	18.81
3202	Wi (1) 7^{h} 1095 *m.*	G5	6.36	6.08	38 59.059	3.0808	− .0032	− .0005	+ 0 22 46.74	8.391	.404	− .005	4	17.76
3203	Brad 1098	K0	6.00	5.99	39 1.97	5.7539	− .0800	+ .0071	+65 38 54.75	8.395	.758	+ .012	4	18.72
3204	Brad 1100	A5	6.35	6.49	39 13.58	5.4560	− .0669	− .0047	+63 1 30.38	8.410	.718	− .062	5 4	18.52 19.66
3205	BD−21° 2090	A0	9.1	7.8	39 27.719	2.5935	+ .0006	− .0010	−21 34 2.18	8.429	.339	+ .039	4	18.80
3206	Wi (2) 7^{h} 1029	F8	6.75	6.75	7 39 30.139	+4.0815	− .0208	+ .0032	+39 45 50.18	−8.432	− .537	− .689	4	19.31
3207	κ Geminorum *br.*	G5	3.70	3.64	39 37.182	3.6274	− .0112	− .0016	+24 35 27.44	8.441	.475	− .062	77 43	19.12 19.14
3208	BD− 1° 1819		9.7	8.79	39 48.458	3.0480	− .0029	− .0020	− 1 10 11.54	8.456	.399	− .025	4	18.43
3209	BD+42° 1757	Ma	*8.75*	9.10	39 58.514	4.1746	− .0233	+ .003	+42 17 37.72	8.470	.548	− .01	4	18.49
3210	BD+12° 1658		8.3	9.27	40 9.060	3.3327	− .0064	− .002	+12 7 12.04	8.484	.436	+ .01	4	18.81
3211	Brad 1118	K5	4.82	4.8	7 40 18.578	+2.4232	+ .0011	− .0005	−28 13 11.69	−8.496	− .316	+ .012	4	18.68
3212	β Geminorum	K0	1.21	1.43	40 25.381	3.7221	− .0131	− .0471	+28 13 14.03	8.505	.487	− .056	66 31	19.48 20.02
3213	BD+ 7° 1828		8.7	9.2	40 30.500	3.2388	− .0051	− .004	+ 7 48 54.34	8.512	.424	− .05	5	20.24
3214	BD+55° 1221	Ma	*7.93*	7.82	40 34.005	4.8485	− .0440	− .004	+55 44 10.78	8.516	.637	− .01	5	18.15
3215	BD+14° 1744	A0	8.24	8.69	40 53.445	3.3920	− .0073	− .004	+14 47 36.89	8.542	.443	− .01	4	18.83
3216	CD−29° 4865	K2	9.3	ft.	7 41 1.991	+2.3924	+ .0011	− .0028	−29 22 31.13	−8.555	− .311	− .005	5	19.06
3217	BD− 3° 2044	A2	8.7	8.37	41 7.912	2.9994	− .0024	− .0029	− 3 28 20.55	8.561	.394	− .012	4	18.72
3218	BD−12° 2121		9.1		41 10.457	2.7948	− .0006	− .0026	−12 57 5.47	8.566	.364	− .052	4	18.80
3219	BD+51° 1356	G5	*9.54*		41 27.954	4.5640	− .0349	+ .002	+51 0 7.55	8.587	.597	.00	4	19.35
3220	Brad 1115	K2	5.02	5.16	41 29.603	3.4816	− .0089	− .0048	+18 42 22.77	8.590	.454	− .069	4	18.76
3221	BD+16° 1551	K0	*7.65*	8.06	7 41 34.924	+3.4334	− .0080	.000	+16 38 1.84	−8.597	− .448	.00	4	18.69
3222	BD+75° 316	A2	9.07	9.5	41 51.14	7.7192	− .2040	+ .0091	+75 26 37.34	8.618	1.012	− .006	4	18.72
3223	4 Puppis	F0	5.11	4.93	42 15.834	2.7639	− .0004	− .0012	−14 22 6.75	8.650	.360	+ .003	74 65	18.95 19.08
3224	π Geminorum	K2	5.29	5.07	42 21.052	3.8739	− .0166	+ .0003	+33 36 47.33	8.657	.505	− .040	4	19.28
3225	BD+50° 1472	K0	7.42	7.28	42 21.122	4.5068	− .0334	− .0022	+49 57 17.39	8.658	.589	− .028	4	18.38
3226	Lac 2957	F8	5.39		7 42 36.005	+2.2597	+ .0013	− .0202	−34 0 51.90	−8.677	− .293	+1.692	4	19.64
3227	BD−15° 2035		9.8		42 43.794	2.7423	− .0003	− .0012	−15 20 24.00	8.687	.357	− .003	4	19.06
3228	BD+23° 1810	K0	*8.35*	8.78	42 44.221	3.5926	− .0110	− .002	+23 21 3.55	8.688	.468	− .03	4	18.76
3229	BD− 4° 2085	K0	9.1		42 53.075	2.9717	− .0022	+ .0016	− 4 47 39.69	8.699	.387	− .024	5	18.68
3230	BD+29° 1614	G5	7.65	7.30	43 0.066	3.7362	− .0138	− .0018	+28 51 54.88	8.709	.487	− .002	4	18.12
3231	BD+ 1° 1905	G5	*7.62*	7.46	7 43 2.333	+3.0962	− .0035	− .0014	+ 1 6 57.31	−8.712	− .403	− .009	4	19.10
3232	BD+ 9° 1765	F8	7.22	7.31	43 10.490	3.2811	− .0059	− .0029	+ 9 49 36.29	8.722	.427	+ .152	4	18.75
3233	BD+79° 258	F5	8.65	8.5	43 16.41	9.2289	− .3390	− .0201	+78 56 36.29	8.730	1.207	− .078	4	18.46
3234	CD−25° 5049	F8	8.36	8.4	43 36.606	2.5078	+ .0009	− .0001	−25 10 20.33	8.757	.324	− .038	4	19.35
3235	BD+70° 480		*8.60*	8.6	43 38.05	6.4935	− .1244	+ .0070	+70 38 19.93	8.759	.846	+ .012	4	18.13
3236	Åbo (30) 161	B5	5.84	6.09	7 43 46.232	+2.5793	+ .0006	− .0007	−22 19 19.46	−8.769	− .334	+ .002	4	19.39
3237	Lal 15177	K0	6.95	6.44	43 48.324	3.1907	− .0047	− .0010	+ 5 36 32.70	8.772	.414	− .033	4	18.68
3238	BD+48° 1579		*9.72*		44 0.759	4.4129	− .0312	+ .009	+48 7 59.42	8.788	.575	+ .04	4 5	19.17 19.57
3239	BD+46° 1317	G0	8.6	8.68	44 5.321	4.3295	− .0287	.000	+46 18 10.25	8.794	.564	− .09	4	18.80
3240	BD+ 7° 1838	B8	8.1	8.17	44 5.463	3.2198	− .0051	− .003	+ 6 59 2.98	8.794	.418	− .02	4	18.80

3202. $6^{\mathrm{m}}5$–8.5^{m}, $0''7$, 204°.

3207. $8^{\mathrm{m}}0$, $6''9$, 238°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3241	BD+63° 737	F	*9.04*	8.79	7 44 9.02	+5.4325	−0.0696	−0.006	+63 1 53.27	−8.799	−0.707	−0.02	5	18.65
3242	BD+73° 387	G0	*8.58*	8.3	44 30.03	6.9839	− .1569	− .0014	+72 56 44.29	8.827	.910	− .023	4	18.15
3243	BD+20° 1913	K0	7.80	7.68	44 33.064	3.5067	− .0096	+ .001	+19 58 13.07	8.831	.456	− .02	4	18.34
3244	BD+56° 1241	K2	*8.50*	8.46	44 37.972	4.8903	− .0476	− .002	+56 34 38.91	8.837	.636	.00	4	18.03
3245	Wi (2) 7^h 1183	G5	6.82	6.80	44 54.750	3.6695	− .0127	− .0024	+26 27 53.81	8.859	.476	− .007	4	18.22
3246	BD+13° 1775	K0	6.52	6.33	7 45 4.596	+3.3497	− .0071	− .003	+13 0 56.33	−8.872	− .434	− .02	4	18.29
3247	BD−17° 2171	F5	8.0	8.5	45 10.068	2.7017	− .0001	− .0006	−17 12 27.72	8.879	.349	− .034	4	17.89
3248	BD−18° 2029	K2	7.5	7.0	45 11.114	2.6608	+ .0002	− .0010	−18 58 27.73	8.880	.344	− .004	4	18.29
3249	BD+ 4° 1828	A0	*8.84*	9.1	45 12.116	3.1555	− .0043	+ .0004	+ 3 57 4.90	8.882	.409	− .021	4	18.84
3250	BD+38° 1823	F5	*9.06*	9.10	45 24.648	4.0352	− .0210	− .003	+38 47 31.96	8.898	.523	− .11	5	18.72
3251	BD+29° 1623	K0	*9.44*		7 45 25.247	+3.7591	− .0146	+ .0052	+29 49 18.41	−8.899	− .487	+ .003	4	18.42
3252	BD− 6° 2315		9.4		45 28.135	2.9353	− .0018	.000	− 6 32 44.25	8.903	.379	+ .03	4	18.03
3253	CD−27° 4573 br.	A0	9.1		45 33.522	2.4571	+ .0010	+ .0002	−27 12 52.15	8.910	.317	+ .003	4	19.16
3254	ξ Argus br.	G0	3.47	2.8	45 55.810	2.5236	+ .0009	− .0005	−24 39 29.68	8.939	.325	+ .001	4	18.62
3255	BD+69° 443		*8.67*	8.7	46 0.45	6.2741	− .1147	+ .0015	+69 30 59.09	8.945	.815	+ .002	4	18.25
3256	BD−20° 2211	B8	7.8	8.03	7 46 3.519	+2.6117	+ .0005	.0000	−21 4 59.28	−8.949	− .337	− .014	4	17.76
3257	6 Puppis	K0	5.54	5.26	46 4.369	2.7066	− .0001	+ .0038	−17 1 26.03	8.950	.349	− .114	4	18.63
3258	BD+40° 1951	A0	9.1		46 11.388	4.0943	− .0228	− .002	+40 30 57.03	8.959	.531	− .02	4 3	18.13 18.43
3259	BD+52° 1256	K0	*9.35*	8.8	46 29.131	4.6092	− .0383	+ .002	+52 8 2.61	8.982	.597	.00	4	18.71
3260	BD+50° 1481	F5	*9.36*		46 31.655	4.5154	− .0353	− .001	+50 22 30.40	8.985	.586	− .04	4	19.36
3261	CD−28° 4936 br.	B9	10.8	ft.	7 46 42.235	+2.4156	+ .0012	+ .0001	−28 49 30.00	−8.999	− .311	− .045	5	20.44
3262	BD+11° 1693	G5	*8.34*	8.36	47 0.295	3.3127	− .0066	− .004	+11 22 11.95	9.023	.427	+ .01	5 4	18.52 17.93
3263	BD− 8° 2100	A0	9.0		47 1.502	2.8986	− .0014	+ .003	− 8 18 0.51	9.024	.374	− .03	4	18.11
3264	Wi (1) 7^h 1320	K0	6.32	6.3	47 7.882	2.8425	− .0011	− .0007	−10 55 26.23	9.033	.367	− .039	4	17.84
3265	BD+68° 509		*9.50*		47 26.46	6.0660	− .1046	+ .0045	+68 17 1.63	9.057	.784	− .004	4	19.05
3266	BD+33° 1608		*8.51*	8.40	7 47 28.838	+3.8440	− .0168	+ .003	+32 54 17.62	−9.060	− .497	.00	4	18.38
3267	ζ Can Min	B8	5.11	5.31	47 33.082	3.1137	− .0039	− .0016	+ 1 58 19.24	9.065	.401	− .006	4	18.63 17.38
3268	BD+17° 1693		*9.24*		47 44.364	3.4340	− .0087	.000	+16 52 9.71	9.080	.443	.00	4	18.64
3269	BD−22° 2052	G0	8.5	8.4	47 48.066	2.5713	+ .0007	− .0045	−22 49 41.54	9.085	.330	− .009	4	18.61
3270	9 Puppis m.	G0	5.34	5.30	48 4.030	2.7828	− .0006	− .0041	−13 41 5.11	9.106	.358	− .339	4	18.92
3271	BD+19° 1860	A3	*8.50*	8.64	7 48 7.297	+3.4834	− .0095	− .001	+19 2 0.13	−9.110	− .449	− .01	4	18.00
3272	Wi (1) 7^h 1336 br.	A5	6.98	6.84	48 7.689	3.0135	− .0027	− .0027	− 2 50 54.06	9.110	.388	+ .006	4	17.85
3273	φ Geminorum	A2	4.99	5.1	48 36.172	3.6779	− .0134	− .0022	+26 58 26.36	9.147	.473	− .037	4	18.51
3274	BD+78° 273	K0	*7.80*	7.60	48 46.63	8.5985	− .2971	+ .0082	+77 51 37.03	9.161	1.111	− .034	4 3	18.31 19.66
3275	BD+14° 1773	F8	8.64	8.2	48 49.280	3.3850	− .0079	− .005	+14 43 17.80	9.164	.435	− .03	4	18.09
3276	26 Lyncis	K0	5.69	5.60	7 48 53.503	+4.3820	− .0319	− .0042	+47 46 24.29	−9.170	− .564	− .008	4	18.91
3277	BD− 0° 1849	K0	8.1	8.36	48 57.570	3.0546	− .0032	− .0016	− 0 52 24.20	9.175	.391	− .006	4	18.34
3278	BD+25° 1785	G5	*9.32*		48 58.183	3.6252	− .0122	− .010	+24 56 26.90	9.176	.466	.00	4	17.78
3279	CD−25° 5196	F0	10.0		49 0.986	2.5002	+ .0010	+ .0030	−25 43 47.72	9.179	.320	+ .006	4	18.15
3280	BD+60° 1096		*9.85*		49 5.35	5.1972	− .0626	− .007	+60 47 24.51	9.185	.669	− .02	4	18.29
3281	BD+ 2° 1814	G5	8.58	8.60	7 49 6.173	+3.1180	− .0040	− .0020	+ 2 10 54.00	−9.186	− .400	− .022	4	18.53
3282	BD+34° 1705	G0	7.72	7.40	49 38.017	3.8983	− .0185	− .0097	+34 49 59.62	9.227	.501	− .185	4	18.30
3283	BD+54° 1182	F0	*9.07*	8.6	50 1.110	4.7019	− .0432	+ .001	+53 57 43.12	9.257	.604	− .02	5 6	17.64 18.23
3284	BD+43° 1748	G5	*9.32*	9.1	50 9.273	4.1969	− .0266	+ .002	+43 29 39.14	[illegible]	.538	− .17	5 4	17.20 17.96
3285	BD+27° 1501	G5	*8.21*	8.7	50 14.371	3.6839	− .0137	+ .0033	+27 17 24.20	9.274	.472	+ .002	4	17.56
3286	BD+36° 1712	G5	8.85	8.24	7 50 22.472	+3.9387	− .0197	+ .001	+36 10 28.00	−9.285	− .505	+ .01	5	18.71
3287	BD− 4° 2135	A2	8.9		50 26.237	2.9833	− .0025	− .0004	− 4 19 6.45	9.290	.381	− .015	4	17.97
3288	166 B Camelop	K0	5.56	5.45	50 38.99	7.2371	− .1863	− .0020	+74 8 1.60	[illegible]	.931	− .033	8	18.32
3289	BD−12° 2204 m.	F5	8.4	8.49	50 51.378	2.8079	− .0008	.0000	−12 37 7.05	9.322	.358	− .039	5	18.84
3290	Brad 1137	A0	5.36	5.36	50 59.830	3.5054	− .0101	− .0007	+20 5 46.71	9.333	.448	− .046	5	17.80
3291	Lal 15408	K0	6.86	7.1	7 51 15.458	+3.7569	− .0155	− .0008	+30 3 50.70	−9.353	− .480	+ .005	4	17.59
3292	BD−14° 2275	F5	8.7	8.6	51 44.759	2.7671	− .0005	− .0005	−14 30 38.96	9.391	.352	− .044	4	18.30
3293	BD+53° 1200	G0	*9.14*	9.3	52 0.120	4.6446	− .0420	.000	+53 6 20.87	9.411	.504	− .07	4	17.58
3294	BD+ 7° 1873	A2	*8.47*	8.52	52 26.502	3.2294	− .0057	− .002	+ 7 34 17.03	9.415	.412	− .02	4	18.00
3295	1 Cancri	K0	5.96	5.64	52 27.008	3.4108	− .0086	− .0019	+16 0 18.12	9.445	.434	− .049	4	18.78
3296	CD−26° 5211	K0	8.1	7.6	7 52 29.317	+2.4748	+ .0011	+ .0004	−26 53 59.67	−9.448	− .314	− .076	4	17.66
3297	Grmb 1384	K0	6.47	5.90	52 39.717	4.2181	− .0279	+ .0038	+44 11 32.35	9.462	.538	+ .007	4	17.89
3298	BD+59° 1127	G0	*8.72*	9.3	52 42.924	5.0271	− .0575	− .005	+58 55 16.41	9.466	.641	− .03	4	18.25
3299	BD+33° 1623	K0	7.76	7.62	52 51.644	3.8420	− .0177	+ .001	+33 9 24.31	9.477	.400	− .03	4	18.59
3300	BD+18° 1795	F2	*8.29*	7.88	52 54.962	3.4625	− .0090	− .002	+18 19 0.25	9.481	.441	− .05	4	18.35

3253. 10^{m}6, 4$''$6, 201°.
3254. 11^{m}, 4$''$5, 190°.

3261. 13^{m}, 4$''$2, 176°.
3270. 5^{m}7–6^{m}5, 0$''$5, 295°; 23 yrs.

3272. 9^{m}5, 2$''$5, 352°.
3289. 8^{m}0–9^{m}5, 1$''$0, 8°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3301	BD−16° 2204	A0	9.6		7 53 1.534	+ 2.7227	−0.0002	−0.0001	−16 33 27.57	− 9.490	−0.345	−0.012	4	18.44
3302	BD+ 9° 1825		*9.21*		53 5.075	3.2739	− .0064	− .003	+ 9 41 57.25	9.494	.416	− .03	5	18.61
3303	11 Puppis	F8	4.35	4.9	53 25.136	2.5816	+ .0007	− .0029	−22 39 56.35	9.520	.327	+ .008	4	17.94
3304	BD+39° 2040		9.4	9.3	53 28.070	4.0477	− .0233	+ .003	+39 39 49.92	9.524	.515	− .04	4	17.62
3305	BD+49° 1695	G0	8.0	8.65	53 45.553	4.4242	− .0349	− .008	+48 59 40.98	9.546	.563	− .07	4	18.24
3306	BD+26° 1689	F8	*8.72*	8.8	7 53 47.868	+ 3.6519	− .0135	− .0035	+26 14 26.40	− 9.549	− .466	− .048	4	18.49
3307	BD+42° 1791	K5	8.9	8.82	53 51.705	4.1497	− .0262	− .001	+42 30 45.71	9.554	.527	− .03	5	18.75
3308	BD− 8° 2154	A0	9.1		54 6.086	2.8966	− .0017	+ .001	− 8 31 56.88	9.573	.367	− .02	4	18.86
3309	Brad 1139	K0	5.40	5.53	54 11.807	3.1227	− .0043	− .0106	+ 2 26 19.89	9.580	.396	+ .095	4	18.03
3310	BD−10° 2309 *br.*	K0	8.0	8.59	54 16.298	2.8516	− .0012	− .0010	−10 40 2.50	9.586	.361	− .010	4	17.87
3311	BD+12° 1733	G5	*8.72*	8.56	7 54 19.829	+ 3.3294	− .0073	− .003	+12 20 16.98	− 9.590	− .422	− .01	4	17.80
3312	BD− 6° 2383	A0	7.7	8.32	54 28.426	2.9455	− .0022	− .001	− 6 11 17.22	9.601	.373	+ .01	4	17.94
3313	Lac 3081	A2	4.85	5.00	54 28.751	2.3922	+ .0013	− .0008	−30 7 6.43	9.602	.303	+ .008	4	18.46
3314	BD+82° 226		9.2		54 37.97	11.3232	− .6495	− .0024	+81 54 38.39	9.613	1.444	+ .013	[illegible]	18.06
3315	BD+36° 1725	F8	*9.12*	8.83	54 38.838	3.9407	− .0206	+ .002	+36 30 31.13	9.614	.500	+ .01	6	19.53
3316	BD+21° 1731	G5	*7.72*	7.63	7 54 51.286	+ 3.5243	− .0109	+ .0127	+21 4 27.81	− 9.630	− .446	− .545	4	18.67
3317	53 Camelop	A2	6.00	5.89	54 53.07	5.1479	− .0642	− .0019	+60 32 40.66	9.633	.654	− .022	[illegible]	19.11
3318	BD− 0° 1874	A2	7.98	8.36	54 55.460	3.0681	− .0035	− .0006	− 0 13 31.77	9.636	.388	− .002	4	18.43
3319	Pi 7ʰ 267	K5	6.20	6.06	55 7.182	3.3531	− .0078	− .0015	+13 27 38.53	9.651	.424	− .013	4	18.10
3320	BD+ 5° 1849	F8	*8.48*	8.20	55 8.756	3.1905	− .0053	+ .002	+ 5 44 27.97	9.653	.403	− .02	4	17.86
3321	BD+66° 532		*9.16*	8.3	7 55 36.27	+ 5.7519	− .0954	+ .0010	+66 24 39.14	− 9.688	− .730	+ .004	4 5	18.02 18.65
3322	CD−28° 5217	A0	9.0		55 38.534	2.4289	+ .0013	+ .0018	−28 49 30.90	9.691	.306	− .005	5 4	18.26 19.34
3323	27 Monocerotis	K0	5.06	5.42	55 44.367	3.0020	− .0028	− .0033	− 3 27 38.43	9.698	.379	+ .001	4	19.38
3324	BD+11° 1733		9.0	8.87	55 55.032	3.3051	− .0071	− .002	+11 14 32.65	9.712	.417	.00	[illegible]	18.35
3325	BD+45° 1524	F8	*8.70*	8.5	55 55.793	4.2533	− .0300	+ .001	+45 16 57.99	9.713	.538	− .04	4	17.71
3326	ω¹ Cancri	K0	5.88	5.78	7 56 5.551	+ 3.6329	− .0134	+ .0010	+25 36 46.35	− 9.725	− .459	− .001	4	19.21
3327	Cape (60) 302	A2	4.64	4.65	56 16.908	2.6892	.0000	− .0006	−18 10 44.13	9.740	.338	− .045	4	18.20
3328	BD+22° 1834	K2	8.7	8.68	56 38.316	3.5580	− .0117	− .004	+22 34 46.37	9.767	.449	− .02	4	18.62
3329	BD−20° 2329	F8	9.2		56 39.565	2.6329	+ .0005	− .0018	−20 39 11.12	9.769	.331	− .002	4	18.83
3330	BD+31° 1715		*9.37*	9.5	56 40.017	3.7848	− .0170	+ .0010	+31 23 40.62	9.769	.478	− .016	[illegible]	18.44
3331	BD− 2° 2379	B3	6.43	6.3	7 56 42.757	+ 3.0185	− .0030	− .0016	− 2 39 41.23	− 9.773	− .380	+ .003	4	18.81
3332	BD−22° 2114	A3	9.2		57 10.357	2.5867	+ .0007	− .0021	−22 38 18.20	9.808	.325	+ .008	4	18.05
3333	BD+62° 974	F	*9.15*		57 14.98	5.2696	− .0716	− .006	+62 3 28.10	9.814	.665	− .01	5	17.84
3334	BD+28° 1527	A0	*8.96*	9.3	57 18.131	3.7028	− .0150	− .0006	+28 24 24.56	9.818	.466	− .005	5	18.06
3335	BD+20° 1982	B9	7.50	7.56	57 25.416	3.4957	− .0107	− .001	+19 57 36.23	9.827	.440	− .03	4	18.07
3336	BD+46° 1349	F5	7.6		7 57 29.884	+ 4.2977	− .0319	+ .001	+46 26 27.96	− 9.832	− .541	− .01	4	17.84
3337	Wi (1) 7ʰ 1591	F5	6.11	6.6	57 30.136	3.2600	− .0064	− .0022	+ 9 8 8.30	9.833	.409	+ .019	4	18.34
3338	BD− 4° 2176	F2	8.7	8.7	57 33.518	2.9802	− .0025	− .0007	− 4 32 36.58	9.837	.374	− .020	4	18.10
3339	BD+15° 1732		9.7		57 36.081	3.3976	− .0088	.000	+15 35 31.87	9.840	.429	.00	5	18.45
3340	BD−12° 2280	A0	8.3		57 39.612	2.8131	− .0009	− .0014	−12 34 16.49	9.845	.353	+ .015	4	17.38
3341	Grmb 1359	A0	6.39	6.61	7 57 58.30	+14.7123	−1.2703	− .0040	+84 17 35.76	− 9.869	−1.863	− .028	[illegible]	18.21
3342	BD−14° 2335		9.2		58 23.210	2.7687	− .0005	+ .0006	−14 39 37.63	9.900	.347	− .012	4	18.11
3343	BD+54° 1195	*	7.05	7.2	58 23.934	4.6664	− .0455	.000	+53 54 14.58	9.901	.587	− .01	4	17.48
3344	Wi (1) 7ʰ 1628	G0	6.30	6.95	58 30.162	2.9483	− .0023	+ .0009	− 6 6 48.28	9.909	.370	− .012	4	18.04
3345	χ Geminorum	K0	5.04	5.5	58 36.403	3.6907	− .0150	− .0015	+28 1 11.25	9.917	.463	− .052	4	18.00
3346	BD+ 4° 1885		*9.17*		7 58 36.772	+ 3.1578	− .0049	− .0025	+ 4 11 28.06	− 9.917	− .396	− .014	4	17.87
3347	CD−26° 5399 *br.*	A3	8.8	8.02	58 45.317	2.4805	+ .0011	.0000	−27 1 42.11	9.928	.310	− .008	4	17.89
3348	BD+41° 1779		8.9	8.60	59 17.811	4.0947	− .0260	+ .002	+41 23 42.54	9.969	.514	+ .01	5	18.73
3349	BD+ 2° 1859	G5	*8.37*	7.91	59 27.545	3.1131	− .0043	− .0014	+ 1 59 37.74	9.982	.389	− .036	4	18.07
3350	BD+57° 1120	G0	*9.55*		7 59 46.511	4.8582	− .0542	− .006	+57 2 5.10	10.006	.609	− .08	4	18.11
3351	BD−15° 2232	K0	8.0	7.8	8 0 18.506	+ 2.7386	− .0003	− .0002	−16 6 56.33	−10.046	− .342	− .036	4	18.12
3352	CD−29° 5439	A0	7.4	7.57	0 27.842	2.4269	+ .0013	+ .0001	−29 11 34.53	10.058	.302	.000	4	18.42
3353	BD+79° 267	A2	8.6		0 35.53	9.2805	− .4123	− .0062	+79 27 18.56	10.067	1.166	.000	4	17.82
3354	8 Cancri	A0	5.11	5.33	0 37.192	3.3469	− .0081	− .0022	+13 20 49.81	10.070	.417	− .078	4	18.36
3355	BD+37° 1822	F2	*9.18*	8.90	0 39.461	3.9469	− .0220	− .003	+37 6 47.90	10.072	.493	− .04	5	17.99
3356	BD+34° 1741 *br.*	F0	9.18	9.28	8 0 40.847	+ 3.8763	− .0200	+ .001	+34 49 12.86	−10.074	− .484	− .03	4	18.04
3357	BD+26° 1713	K0	*8.28*	8.10	0 42.858	3.6447	− .0143	+ .0011	+26 20 38.08	10.077	.455	− .011	4 5	18.21 18.80
3358	BD−18° 2155	K2	8.0	6.95	0 56.918	2.6807	+ .0002	− .0040	−18 45 22.02	10.094	.333	− .002	4	18.60
3359	BD+ 5° 1869	A0	*8.75*	8.42	1 3.666	3.1866	− .0054	.000	+ 5 38 48.27	10.103	.397	.00	4	18.20
3360	BD+50° 1508	F2	*8.65*	8.60	1 6.842	4.4540	− .0386	− .001	+50 7 22.45	10.107	.557	− .03	4	18.27

3310. 11ᵐ0, 1″4, 239°.

3343. F2, A2.

3347. 11ᵐ3, 2″1, 330°.

3356. 11ᵐ6, 3″1, 295°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3361	Lac 3127 *br.*	K2	6.69	5.92	8 1 10.903	+2.5231	+0.0010	−0.0019	−25 28 19.01	−10.112	−0.313	−0.015	4	18.84
3362	BD+ 1° 1990	A0	8.09	8.11	1 26.866	3.0913	− .0041	− .0016	+ 0 55 19.09	10.132	.384	+ .005	4	18.10
3363	BD+43° 1770	A0	6.24	6.2	1 37.657	4.1661	− .0288	+ .0004	+43 29 28.30	10.146	.519	− .031	4	18.76
3364	BD− 9° 2363	B9	6.94	6.48	1 39.460	2.8717	− .0015	− .001	− 9 53 39.57	10.148	.356	− .02	4	18.65
3365	Wi (1) 7^h 1720	K0	6.60	6.8	1 44.547	3.0658	− .0037	− .0020	− 0 20 39.49	10.154	.381	− .001	4	18.59
3366	BD+24° 1858	F5	*8.94*	9.18	8 1 50.023	+3.5947	− .0132	− .0026	+24 22 39.69	−10.161	− .447	− .036	4	18.22
3367	BD+69° 455	G5	8.54	8.42	1 57.19	6.1813	− .1281	+ .0008	+69 40 23.27	10.170	.775	+ .005	4	18.44
3368	BD+33° 1644	F5	*8.46*	8.00	2 11.994	3.8338	− .0192	+ .001	+33 28 41.81	10.189	.477	− .03	4	18.52
3369	BD+40° 1994		*9.55*		2 13.710	4.0351	− .0249	.000	+39 54 20.81	10.191	.502	+ .01	3	17.31
3370	BD+46° 1356 *s. f.*	G5	9.3		2 20.738	4.2816	− .0329	+ .013	+46 25 8.41	10.200	.533	− .08	3	17.16
3371	27 Lyncis	A2	4.87	5.18	8 2 26.784	+4.5310	− .0421	− .0058	+51 44 18.96	−10.208	− .564	− .008	4	18.13
3372	BD− 8° 2226	G0	9.3		2 55.522	2.9041	− .0018	.000	− 8 21 4.00	10.243	.359	− .01	4	18.29
3373	BD+65° 612		8.96	9.2	3 1.92	5.5603	− .0915	− .0019	+65 13 2.63	10.251	.692	− .033	5	18.02
3374	μ^{1} Cancri	G0	5.38	5.38	3 3.497	3.5323	− .0120	+ .0018	+21 48 54.70	10.253	.437	− .081	5 4	18.62 19.07
3375	BD+ 9° 1877	A2	9.1		3 40.830	3.2599	− .0068	− .002	+ 9 16 32.77	10.300	.404	− .02	4	18.09
3376	BD+17° 1768		*9.56*		8 3 40.865	+3.4232	− .0098	− .002	+17 0 0.83	−10.300	− .424	.00	4	17.87
3377	Cape (50) 1405	A3	5.25	5.58	3 46.202	2.6482	+ .0004	− .0007	−20 19 21.31	10.307	.326	− .026	4	18.72
3378	BD+27° 1544	K0	6.79	7.0	3 56.150	3.6746	− .0154	− .0009	+27 42 51.26	10.319	.455	− .034	4	18.12
3379	BD−22° 2160	Nb	Var.	7.3	4 2.314	2.5941	+ .0008	+ .0018	−22 40 49.56	10.327	.320	− .037	4	18.86
3380	BD+59° 1144	K0	*8.10*	7.61	4 5.710	5.0113	− .0636	− .002	+59 25 40.37	10.331	.622	+ .03	4	18.09
3381	ρ Argus	F5	2.88	3.2	8 4 8.234	+2.5612	+ .0009	− .0065	−24 4 21.97	−10.334	− .316	+ .045	4	18.35
3382	BD+14° 1831	F5	6.26	6.13	4 14.261	3.3555	− .0085	− .001	+13 52 29.33	10.342	.414	+ .01	4	18.25
3383	BD+76° 307	A0	*8.35*	8.6	4 17.05	7.6888	− .2547	− .0044	+76 4 25.23	10.345	.955	− .041	4	18.64
3384	BD− 2° 2447	F8	9.2		4 25.204	3.0267	− .0032	− .0062	− 2 18 11.50	10.356	.373	+ .042	4	18.35
3385	BD+ 2° 1883	A0	8.8	8.7	4 38.685	3.1206	− .0046	+ .0006	+ 2 23 55.38	10.372	.385	+ .003	5 4	18.79 18.43
3386	BD+10° 1738	A2	8.14	8.0	8 4 41.787	+3.2897	− .0073	− .002	+10 44 38.86	−10.376	− .405	.00	4	19.19
3387	3 H Urs Maj	G5	5.48	5.25	4 52.25	6.0057	− .1206	+ .0008	+68 42 10.88	10.389	.744	+ .005	12	18.86
3388	Wi (2) 7^h 1678	F8	6.64	6.23	4 59.239	3.8935	− .0213	+ .0163	+35 41 45.02	10.398	.482	− .245	4	18.61
3389	Fedor 1261	F5	6.81	6.85	5 1.763	4.6156	− .0465	+ .0016	+53 28 58.62	10.401	.571	− .085	4	18.77
3390	BD− 4° 2235	Ma	7.48	7.44	5 16.853	2.9865	− .0027	− .0005	− 4 19 6.68	10.420	.368	+ .016	4	17.83
3391	BD+17° 1776	K0	*7.99*	8.34	8 5 20.328	+3.4323	− .0101	− .001	+17 29 14.50	−10.424	− .423	+ .01	4	18.58
3392	BD+73° 401		*8.94*	8.7	5 21.71	6.7906	− .1785	− .0056	+72 56 2.67	10.426	.841	− .004	4	17.74
3393	Brad 1167	G5	5.83	5.68	5 38.221	3.6229	− .0144	− .0051	+25 45 4.87	10.447	.446	− .354	4	18.84
3394	BD+64° 672	G5	*8.60*	8.76	6 2.97	5.4374	− .0871	− .0035	+64 16 35.63	10.477	.671	− .019	4	18.62
3395	Oelt 8668	K0	7.08	6.82	6 21.696	4.3913	− .0382	− .0020	+49 11 50.57	10.501	.541	− .008	5 6	17.79 18.35
3396	BD+40° 2006		9.6	8.70	8 6 24.068	+4.0542	− .0265	− .001	+40 46 16.88	−10.504	− .499	− .01	5	19.03
3397	Lal 15970	A0	6.14	6.29	6 29.307	3.3748	− .0091	− .0019	+14 52 1.67	10.510	.415	− .022	5 4	17.26 18.09
3398	CD−24° 6569 *m.*	A5	10.1		6 56.743	2.5464	+ .0011	− .0026	−24 50 53.44	10.544	.312	− .030	4	18.43
3399	18 Puppis	G0	5.64	5.47	6 57.372	2.7985	− .0007	− .0158	−13 33 47.28	10.545	.342	+ .045	4	18.06
3400	BD+38° 1878		*9.45*		7 5.507	3.9748	− .0239	− .001	+38 27 0.76	10.555	.491	− .04	4	18.74
3401	BD+ 7° 1932		9.1		8 7 14.834	+3.2212	− .0064	− .004	+ 7 27 8.93	−10.566	− .395	.00	4	17.87
3402	CD−26° 5634		9.4	8.4	7 20.686	2.5005	+ .0013	− .0006	−26 44 52.78	10.574	.306	− .045	4	18.10
3403	Pi 7^h 311	K0	5.90	5.71	7 28.167	4.8000	− .0557	+ .0015	+56 41 35.95	10.583	.590	− .039	4	18.29
3404	Brad 1177 *br.*	K0	4.68	5.3	7 31.106	2.8172	− .0009	− .0017	−12 41 20.07	10.587	.344	+ .011	4	17.96
3405	ζ^{1} Cancri *m.*	G0	5.10	5.66	7 37.538	3.4389	− .0105	+ .0046	+17 53 24.85	10.595	.421	− .140	4	18.61
3406	BD−14° 2404	K0	8.2	7.88	8 7 47.333	+2.7858	− .0006	− .0010	−14 11 57.99	−10.607	− .340	− .010	4	17.98
3407	BD−17° 2383		9.3		7 53.568	2.7047	+ .0001	− .0040	−17 59 0.03	10.614	.330	− .030	4	19.31
3408	BD+18° 1869	K2	*8.77*	9.2	7 55.795	3.4576	− .0109	− .003	+18 45 26.50	10.617	.423	− .04	4	17.84
3409	BD− 6° 2506	G5	9.2		8 11.009	2.9495	− .0024	+ .001	− 6 12 29.08	10.636	.360	+ .02	4	18.43
3410	BD+12° 1790		*9.57*		8 12.873	3.3209	− .0082	− .001	+12 21 37.33	10.638	.406	+ .02	4	18.06
3411	BD+33° 1657		*9.43*	9.1	8 8 25.474	+3.8037	− .0195	+ .003	+32 51 14.83	−10.654	− .465	− .07	4	18.41
3412	BD− 7° 2382	K0	9.3		8 34.773	2.9145	− .0019	− .001	− 7 56 47.04	10.664	.356	− .01	5	18.07
3413	BD−16° 2345	F5	9.0		8 35.109	2.7442	− .0003	+ .003	−16 11 32.61	10.666	.335	+ .03	4	18.38
3414	BD+52° 1290	K0	*9.02*		8 45.468	4.5380	− .0449	+ .004	+52 20 15.51	10.679	.555	− .01	4	18.61
3415	CD−28° 5624	B5	8.0	7.84	8 46.447	2.4520	+ .0015	+ .0020	−28 45 44.01	10.680	.298	− .006	4	19.21
3416	BD+25° 1878	A3	9.01	9.21	8 8 49.291	+3.5988	− .0141	− .0025	+24 56 54.77	−10.683	− .440	− .012	4	18.77
3417	BD+47° 1550	F5	8.2	8.40	8 57.145	4.3078	− .0360	− .007	+47 32 11.82	10.693	.527	− .09	4	18.90
3418	BD+22° 1886	F5	*8.68*	8.61	9 7.748	3.5412	− .0129	− .003	+22 31 17.87	10.706	.432	− .01	4	18.28
3419	Grmb 1391	A0	6.17	6.61	9 11.24	11.8682	− .8432	− .0021	+82 40 54.80	10.710	1.457	− .031	9	18.60
3420	173 B Camelop	G5	5.73	5.41	9 31.95	7.6000	− .2591	+ .0067	+76 0 11.73	10.736	.930	+ .012	9	18.32

3361. $10^{m}7$, $1''5$, 24°.
3370. $9^{m}5$, $7''0$, 337°.

3379. $9^{m}4$ to $11^{m}6$
3398. $10^{m}6$–$11^{m}2$, $0''5$, 38°.

3404. 12^{m}, $2''2$, 245°
3405. $5^{m}56$–$6^{m}20$, $0''8$, 251°, 60 yrs.; $6^{m}02$, $5''3$, 109°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3421	BD+ 6° 1900	A0	7.55	7.5	8 9 35.927	+3.2022	−0.0061	−0.001	+ 6 32 45.01	−10.741	−0.390	−0.01	4	18.59
3422	20 Puppis	G5	5.05	5.21	9 39.348	2.7589	− .0003	− .0009	−15 32 47.12	10.745	.335	− .007	4	18.38
3423	BD+ 1° 2036	K0	8.49	7.9	9 45.607	3.0898	− .0043	− .0009	+ 0 52 5.34	10.753	.376	+ .009	4	19.03
3424	BD−20° 2446	K0	8.43	8.28	9 58.569	2.6550	+ .0005	− .0012	−20 19 57.66	10.769	.322	+ .029	4	18.44
3425	BD+42° 1834	G	9.82	9.1	10 5.778	4.0933	− .0287	.000	+42 10 12.51	10.777	.498	+ .04	4	18.63
3426	BD− 9° 2435	B9	8.0	7.96	8 10 8.257	+2.8783	− .0015	.000	− 9 47 21.72	−10.780	− .349	+ .03	5	18.54
3427	BD+54° 1213	F5	*8.62*	8.8	10 26.166	4.6403	− .0500	− .003	+54 19 6.50	10.802	.565	− .08	4	18.57
3428	BD+36° 1775	K0	*8.96*	8.9	10 37.647	3.8957	− .0226	.000	+36 11 2.34	10.817	.474	.00	4	18.82
3429	BD+30° 1677		*8.62*	7.8	11 1.952	3.7187	− .0175	+ .0005	+29 53 21.91	10.846	.451	− .005	4	18.96
3430	BD−21° 2337		9.2		11 6.649	2.6169	− .0008	.0000	−22 4 47.06	10.852	.317	+ .008	4	19.22
3431	BD+53° 1226	F0	*8.40*	8.44	8 11 18.393	+4.5723	− .0474	.000	+53 10 24.22	−10.866	− .555	− .03	4 5	19.20 19.59
3432	Brad 1160	K5	6.20	5.98	11 53.00	6.6628	− .1792	+ .0007	+72 39 26.48	10.909	.810	− .027	8	18.63
3433	BD−11° 2293	A2	9.1		11 54.726	2.8344	− .0011	.0000	−11 59 57.76	10.911	.342	+ .014	[illegible]	18.33
3434	BD+30° 1680	A3	*8.42*	8.45	12 3.275	3.7350	− .0181	− .0018	+30 34 58.91	10.921	.452	− .056	[illegible]	18.51
3435	β Cancri	K2	3.76	3.64	12 10.686	3.2588	− .0072	− .0035	+ 9 25 58.98	10.930	.393	− .054	124 100	19.70 19.64
3436	CD−29° 5825		10.3	ft.	8 12 16.213	+2.4355	+ .0017	− .0001	−29 38 16.41	−10.937	− .293	− .031	4	19.30
3437	BD+27° 1575	K2	7.43	7.80	12 31.178	3.6502	− .0159	+ .0026	+27 17 48.68	10.955	.441	+ .010	[illegible]	17.90
3438	BD+58° 1111	G0	*10.10*		12 57.050	4.8556	− .0612	+ .002	+57 54 55.26	10.987	.587	− .04	[illegible]	18.86
3439	Wi (1) 8^h 228	*	6.68	6.63	13 5.885	3.1600	− .0054	− .0012	+ 4 28 0.33	10.998	.380	− .009	[illegible]	18.11
3440	BD+43° 1799	F8	*9.25*	9.20	13 7.018	4.1194	− .0304	+ .006	+43 8 4.52	10.999	.498	− .06	5	19.14
3441	BD− 1° 2001	K0	8.4	8.21	8 13 15.760	+3.0417	− .0036	− .0011	− 1 35 26.12	−11.010	− .366	− .030	[illegible]	16.65
3442	BD+21° 1806	K2	*9.58*		13 27.594	3.5020	− .0123	− .002	+21 2 15.75	11.024	.422	.00	[illegible]	18.18
3443	BD+69° 462	F2	*8.56*	8.34	13 38.82	6.0222	− .1322	− .0094	+69 16 59.68	11.038	.728	− .059	5	19.26
3444	Brad 1184	A0	6.31	6.9	13 43.028	2.7521	− .0003	− .0012	−16 2 12.01	11.043	.330	− .018	4	18.33
3445	BD+50° 1530	K0	*8.07*	7.90	13 50.406	4.4265	− .0423	+ .001	+50 31 39.56	11.052	.533	− .02	4	18.56
3446	BD− 3° 2291	K0	8.6	8.34	8 14 2.927	+2.9993	− .0031	− .0131	− 3 46 8.99	−11.067	− .360	− .033	4	18.96
3447	BD+24° 1903	G5	7.11	6.81	14 23.434	3.5782	− .0142	+ .0001	+24 25 30.77	11.092	.429	− .031	4	17.73
3448	BD+80° 249	A5	*9.20*		14 35.79	9.9083	− .5609	+ .0012	+80 45 24.08	11.107	1.197	+ .011	[illegible]	19.09
3449	BD+16° 1687	A0	6.79	7.06	14 37.077	3.3995	− .0101	− .001	+16 22 21.41	11.109	.407	− .02	4	18.64
3450	CD−23° 7099	K2	8.8	8.53	14 39.215	2.5762	+ .0011	− .0020	−24 3 23.64	11.111	.308	+ .004	4	18.96
3451	BD+45° 1564		*9.57*		8 14 43.386	+4.1925	− .0335	+ .004	+45 11 57.86	−11.116	− .504	.00	[illegible]	18.13
3452	BD+38° 1896		*9.08*	8.40	14 47.219	3.9355	− .0245	− .002	+37 48 46.71	11.121	.472	− .03	[illegible]	18.82
3453	BD− 5° 2486	G5	8.8	8.42	14 47.266	2.9572	− .0025	− .002	− 5 55 52.60	11.121	.354	− .01	[illegible]	19.16
3454	χ Cancri	F5	5.16	5.8	15 12.414	3.6502	− .0162	− .0010	+27 28 40.67	11.152	.437	− .388	[illegible]	18.85
3455	Wi (1) 8^h 313	A5	6.32	6.43	15 25.054	2.8787	− .0015	− .0044	− 9 54 55.46	11.167	.343	+ .020	[illegible]	19.15
3456	BD+ 5° 1934	A2	8.50	9.4	8 15 39.161	+3.1696	− .0057	− .0016	+ 4 59 40.71	−11.184	− .378	− .009	[illegible]	18.42
3457	BD+12° 1818		*9.44*	9.2	15 41.704	3.3060	− .0083	+ .001	+11 52 51.08	11.187	.396	+ .01	[illegible]	18.44 16.44
3458	λ Cancri	A0	5.87	5.91	15 46.869	3.5727	− .0144	− .0011	+24 16 31.16	11.193	.427	− .031	[illegible]	18.14
3459	BD+13° 1892		9.1	9.4	15 49.505	3.3391	− .0090	− .005	+13 30 43.67	11.196	.399	− .03	4	18.44
3460	Pi 8^h 30	G5	6.48	6.33	16 1.43	5.0619	− .0738	+ .0015	+60 53 9.11	11.211	.607	− .003	4	18.13
3461	BD+28° 1588	K2	*9.17*	9.3	8 16 13.788	+3.6699	− .0169	+ .0006	+28 20 29.11	−11.226	− .438	− .021	5 4	18.55 18.13
3462	BD−14° 2474	F2	8.1	8.35	16 20.624	2.7893	− .0005	− .0054	−14 21 41.15	11.234	.332	+ .050	4	18.56
3463	BD+ 7° 1961	K0	9.1	8.42	16 33.806	3.2102	− .0065	− .003	+ 7 5 13.64	11.250	.382	− .03	[illegible]	18.29
3464	BD+ 2° 1942	A2	*9.06*	8.8	16 48.618	3.1254	− .0050	− .0007	+ 2 43 45.49	11.268	.373	− .002	[illegible]	19.08
3465	BD+34° 1809		*8.93*		17 2.655	3.8266	− .0216	− .001	+34 18 56.93	11.285	.456	− .01	[illegible]	18.12
3466	31 Lyncis	K5	4.43	4.53	8 17 21.801	+4.1178	− .0314	− .0008	+43 26 45.41	−11.309	− .491	− .107	4	18.15
3467	BD+20° 2066	K0	7.40	6.9	17 25.795	3.4789	− .0122	+ .001	+20 12 54.76	11.313	.414	− .03	[illegible]	17.58
3468	BD+ 4° 1960	A0	9.15	9.2	17 26.379	3.1629	− .0057	− .0021	+ 4 40 18.46	11.313	.375	− .011	4	18.32
3469	BD− 7° 2446	K0	8.0	7.90	17 39.142	2.9190	− .0020	− .002	− 7 56 13.02	11.329	.346	+ .04	[illegible]	[illegible]
3470	BD−19° 2371		9.5		17 59.205	2.6731	+ .0005	− .0026	−19 56 33.35	11.353	.316	+ .004	4	18.59
3471	BD+27° 1601	K2	*8.24*	7.93	8 18 12.202	+3.6420	− .0165	− .0001	+27 21 2.53	−11.368	− .433	− .011	[illegible]	17.94
3472	CD−27° 5360	A2	9.8		18 12.673	2.5062	+ .0016	− .0045	−27 14 13.47	11.369	.296	+ .016	[illegible]	19.40
3473	Lac 3277	K0	4.94		18 13.984	2.3635	+ .0020	− .0008	−32 47 57.83	11.371	.279	− .004	5	19.23
3474	BD+79° 272	A	8.90	9.3	18 16.01	9.1097	− .4650	+ .0033	+79 40 10.23	11.373	1.089	+ .027	4	18.22
3475	BD+63° 775		*9.45*		18 18.21	5.2969	− .0890	− .005	+63 40 41.94	11.376	.631	− .01	4	18.28
3476	BD−17° 2466 *m.*	F5	8.7	8.4	8 18 29.512	+2.7212	+ .0001	− .001	−17 43 35.93	−11.389	− .322	− .04	4	19.02
3477	BD+62° 997		*9.45*		18 41.63	5.1299	− .0795	− .001	+61 53 16.27	11.404	.610	− .02	4	18.13
3478	d^1 Cancri	F0	5.88	5.98	18 47.099	3.4423	− .0114	− .0039	+18 35 24.07	11.410	.408	− .032	8	18.72
3479	4 B Urs Min	A0	7.01		18 47.38	58.968	−32.353	− .030	+88 52 26.06	11.411	7.064	+ .008	122 118	20.90 20.99
3480	Wi (2) 8^h 323	A3	7.48	7.9	18 50.794	3.7739	− .0204	− .0020	+32 33 4.88	11.415	.448	+ .002	4	18.85

3439. G0, A2.

3476. $9^{m}2$-$9^{m}4$, $0''3$, 251°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3481	BD+48° 1639	F5	8.02	8.42	8 19 19.207	+4.2910	−0.0387	−0.008	+48 0 4.59	−11.449	−0.508	−0.05	4	18.62
3482	BD+42° 1860		8.7	8.63	19 19.228	4.0688	− .0302	− .0056	+42 14 31.21	11.449	.482	− .044	6	19.61
3483	Brad 1187 *m.*	K5	6.29	6.22	19 32.778	3.2836	− .0081	+ .0005	+10 53 27.10	11.465	.387	− .020	5	19.72 19.31
3484	BD+ 0° 2288	F0	7.36	7.41	19 39.561	3.0788	− .0043	− .0008	+ 0 19 5.34	11.473	.363	− .032	4	19.16
3485	BD− 1° 2028	G5	6.80	7.11	19 52.447	3.0490	− .0038	− .0013	− 1 14 20.37	11.488	.359	− .022	5	17.90
3486	BD+39° 2097	F8	8.7	8.68	8 19 56.227	+3.9753	− .0271	+ .005	+39 30 5.41	−11.493	− .470	− .06	5	19.13
3487	BD+30° 1706	K0	8.59	7.72	20 24.014	3.7017	− .0184	− .0008	+29 54 43.05	11.526	.437	− .021	4	18.63
3488	Lac 3298	A0	6.57	6.73	20 31.447	2.4741	+ .0018	− .0002	−28 42 41.86	11.535	.291	+ .007	4	18.56
3489	BD+66° 551		*8.80*	8.5	20 36.49	5.5434	− .1067	− .0023	+66 8 35.45	11.541	.656	− .002	4	18.61
3490	BD−21° 2417	F8	8.2	8.05	20 47.866	2.6289	+ .0009	− .0049	−22 7 9.52	11.554	.308	.000	4	19.21
3491	BD+59° 1165	F8	8.51	8.49	8 20 53.348	+4.9384	− .0703	− .012	+59 39 59.01	−11.561	− .583	− .11	4	18.54
3492	BD+58° 1120	G5	*7.92*	8.28	21 5.358	4.8496	− .0656	+ .003	+58 27 1.07	11.575	.572	.00	4	19.55
3493	BD+75° 338		*8.70*	8.6	21 6.62	7.1530	− .2418	+ .0034	+75 1 52.15	11.577	.846	+ .002	4	18.90
3494	BD+50° 1538	K5	7.92	7.9	21 10.945	4.3646	− .0424	.0000	+49 49 41.03	11.582	.514	− .050	4	19.37
3495	Brad 1192	F2	6.18	6.2	21 18.296	3.4125	− .0111	− .0130	+17 18 38.75	11.591	.401	− .161	4	18.65
3496	BD+40° 2050	K0	7.22	7.18	8 21 28.536	+3.9921	− .0280	+ .0009	+40 9 16.38	−11.603	− .470	− .020	4	18.89
3497	Pi 8ʰ 72	K5	5.46	5.56	21 36.495	2.5926	+ .0012	− .0039	−23 47 9.53	11.612	.303	+ .028	5	19.10
3498	Pi 8ʰ 67	K0	5.23	5.44	21 37.386	3.2225	− .0069	− .0029	+ 7 49 34.12	11.613	.378	− .005	4	18.24
3499	30 Monocerotis	A0	3.95	4.05	21 39.813	3.0033	− .0032	− .0044	− 3 38 40.61	11.616	.352	− .025	98 84	19.17 19.40
3500	CD−26° 6013		9.6		22 9.788	2.5329	+ .0015	− .0039	−26 24 0.98	11.652	.295	− .044	4	19.41
3501	Wi (1) 8ʰ 503	A2	5.91	6.0	8 22 12.614	+2.7881	− .0005	− .0012	−14 40 6.80	−11.655	− .326	+ .029	4	18.73
3502	BD− 5° 2526	G5	9.3		22 13.967	2.9683	− .0027	+ .0082	− 5 29 9.25	11.657	.347	− .120	4	19.97
3503	BD−13° 2533	A0	8.7	7.8	22 14.716	2.8136	− .0007	− .0020	−13 24 29.26	11.658	.329	+ .010	4	19.04
3504	BD−11° 2355	G5	8.4	8.3	22 17.679	2.8472	− .0011	+ .0008	−11 43 19.91	11.661	.333	.000	4	19.37
3505	BD+23° 1958	G0	8.9	8.96	22 19.148	3.5482	− .0145	− .001	+23 37 39.29	11.663	.415	+ .03	4	19.17
3506	Brad 1199	A5	5.41	5.74	8 22 27.367	+3.0020	− .0032	− .0036	− 3 43 24.66	−11.673	− .351	− .045	4	18.60
3507	BD+31° 1814	F2	*8.35*	7.95	22 38.862	3.7203	− .0193	+ .0038	+30 48 49.34	11.686	.435	− .027	4	19.13
3508	BD+77° 333	K0	8.67	8.91	22 57.19	8.0595	− .3469	− .0091	+77 43 42.69	11.708	.949	− .025	4	19.40
3509	BD+11° 1842		*9.25*	9.3	23 8.245	3.2936	− .0085	− .003	+11 31 3.95	11.721	.384	− .01	4 3	18.61 19.85
3510	BD+38° 1913		*9.66*		23 9.528	3.9308	− .0262	.000	+38 21 54.51	11.723	.460	− .05	4	18.33
3511	BD+71° 459	F8	*8.44*	7.92	8 23 10.23	+6.2737	− .1648	− .0031	+71 17 31.75	−11.724	− .737	− .007	5	18.94
3512	BD+15° 1825	A2	*8.51*	8.6	23 25.937	3.3703	− .0102	− .001	+15 21 49.06	11.742	.394	− .01	4	18.36
3513	*o* Urs Maj *br.*	G0	3.47	3.68	23 37.90	5.0243	− .0768	− .0167	+60 59 13.84	11.756	.588	− .114	4 5	16.90 16.37
3514	BD+ 1° 2096		*8.89*	8.63	23 53.360	3.0925	− .0046	+ .0012	+ 1 3 2.71	11.774	.360	− .010	4	18.02
3515	29 Cancri	A2	5.90	6.11	24 9.585	3.3517	− .0098	− .0009	+14 28 35.83	11.794	.390	− .018	4	18.96
3516	BD+35° 1831 *m.*	A2	8.07	8.30	8 24 38.436	+3.8349	− .0233	− .002	+35 14 24.84	−11.828	− .447	− .01	6	18.57
3517	BD+46° 1407		*9.13*	8.7	24 48.736	4.2076	− .0371	− .002	+46 27 54.06	11.840	.489	− .01	4	18.13
3518	BD− 7° 2499	A2	8.0	8.45	24 55.026	2.9350	− .0022	− .003	− 7 16 41.10	11.847	.340	.00	4	17.78
3519	Wi (2) 8ʰ 481 *br.*	A0	6.80	6.98	25 1.448	3.6091	− .0164	− .0035	+26 27 37.25	11.855	.419	− .018	4	18.48
3520	BD+43° 1824		*9.80*		25 12.972	4.0897	− .0326	+ .002	+43 21 40.21	11.868	.475	− .01	4	18.78
3521	BD+ 6° 1966		9.1	8.6	8 25 13.371	+3.1912	− .0065	− .004	+ 6 16 35.50	−11.869	− .370	− .01	4	19.18
3522	BD+ 9° 1986		*9.35*	9.2	25 14.430	3.2467	− .0076	+ .007	+ 9 10 44.91	11.870	.376	− .15	4	19.16
3523	BD−17° 2515	A3	8.6	8.5	25 15.632	2.7292	+ .0001	− .0025	−17 41 41.90	11.871	.316	− .012	4	18.87
3524	BD−19° 2420	B9	9.0		25 24.187	2.6814	+ .0006	+ .003	−19 58 52.83	11.881	.310	− .01	4	18.63
3525	BD+54° 1238	G0	*8.23*	7.90	25 39.585	4.5438	− .0525	− .003	+53 49 54.95	11.899	.528	− .11	4	18.29
3526	BD+29° 1764	K0	*9.02*	8.6	8 25 40.434	+3.6745	− .0183	− .0007	+29 14 2.83	−11.900	− .426	− .012	4	18.58
3527	BD+17° 1857		*9.62*		25 43.448	3.4000	− .0111	+ .002	+16 55 53.00	11.904	.395	− .01	4 5	19.34 19.70
3528	BD+21° 1854	K7	*9.10*		26 8.279	3.5009	− .0136	− .001	+21 44 33.77	11.933	.405	− .01	4	18.31
3529	BD+34° 1849		*9.49*	8.8	26 11.194	3.7944	− .0222	.000	+33 54 37.63	11.936	.439	+ .03	4	18.36
3530	BD+57° 1150	G5	*8.15*	7.98	26 18.120	4.7247	− .0619	+ .002	+56 59 28.45	11.945	.548	− .04	4	18.55
3531	BD+ 2° 1991	F0	*8.91*	9.1	8 26 25.660	+3.1171	− .0052	− .0008	+ 2 22 8.89	−11.953	− .360	− .011	4	18.13
3532	CD−29° 6252		10.3	ft.	26 44.251	2.4700	+ .0020	− .0016	−29 21 13.71	11.975	.284	− .027	4	18.38
3533	BD+12° 1859	K0	7.8	7.61	26 52.566	3.2986	− .0088	− .001	+11 54 32.33	11.985	.380	− .03	4	18.46
3534	BD−11° 2372	K0	7.6	7.3	26 58.454	2.8542	− .0012	− .0033	−11 31 49.67	11.992	.328	+ .033	4	18.18
3535	BD+67° 550	Mb	*8.47*	8.61	26 59.22	5.6529	− .1208	+ .0030	+67 27 40.49	11.993	.655	− .011	4	18.04
3536	θ Cancri	Ma	*5.57*	5.44	8 27 2.166	+3.4281	− .0119	− .0037	+18 21 57.05	−11.996	− .394	− .069	4	19.37
3537	BD+64° 691	K0	*8.27*	8.49	27 15.00	5.2561	− .0937	− .0123	+63 53 40.95	12.011	.608	+ .020	4	18.71
3538	BD− 8° 2393	K0	8.8	8.4	27 38.086	2.9024	− .0018	+ .003	− 9 3 22.88	12.038	.333	− .02	4	19.24
3539	BD+44° 1755		*9.87*		27 40.186	4.1280	− .0348	− .002	+44 38 42.97	12.040	.477	+ .02	4	18.39
3540	BD+50° 1548	G5	*9.73*		27 42.610	4.3682	− .0450	.000	+50 29 26.98	12.043	.504	+ .02	4	19.52

3483. $6^{m}.5$ $11^{m}.5$, 1″.0, 259°.   3513. 15^{m}, 7″.0, 191°.   3516. (?), 1″, 125°.   3519. $9^{m}.0$, 1″.7, 234°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3541	110 B Lyncis	K0	6.05	6.00	8 27 43.199	+ 3.9161	−0.0267	−0.0090	+38 17 30.74	−12.044	−0.452	−0.175	[illegible]	19.14
3542	η Cancri	K0	5.52	5.11	28 5.062	3.4762	− .0131	− .0026	+20 42 50.23	12.069	.399	− .054	101 78	19.83 19.94
3543	CD−23° 7428	A0	8.1	8.41	28 11.104	2.6141	+ .0013	− .0014	−23 16 2.88	12.076	.299	− .052	4	18.33
3544	Brad 1204	F2	6.14	6.28	28 14.057	3.8679	− .0250	− .0116	+36 42 31.39	12.080	.444	− .008	4 5	18.07 17.31
3545	BD+ 4° 1997	A2	*8.07*	7.77	28 16.442	3.1463	− .0057	− .0010	+ 3 56 44.14	12.083	.360	− .034	4	18.61
3546	BD+47° 1590		9.4	9.1	8 28 24.566	+ 4.2453	− .0398	− .006	+47 43 53.28	−12.092	− .489	.00	[illegible]	19.05
3547	BD− 0° 2017	A3	8.4	8.46	28 45.644	3.0536	− .0041	− .0001	− 1 1 35.85	12.117	.349	− .022	5	18.62
3548	BD+31° 1835		9.1	9.3	29 3.574	3.7157	− .0203	+ .0022	+31 9 17.61	12.137	.426	− .023	[illegible]	18.58
3549	BD+ 8° 2075		9.5		29 4.693	3.2255	− .0072	− .004	+ 8 10 39.82	12.139	.369	.00	4	18.86
3550	BD+15° 1845	A2	8.34	8.06	29 18.316	3.3564	− .0103	− .001	+14 56 50.77	12.155	.384	− .03	5	18.00
3551	BD+52° 1322	G5	7.72	7.23	8 29 18.696	+ 4.4563	− .0499	− .001	+52 28 30.89	−12.155	− .512	− .04	4	18.53
3552	BD+41° 1853	G5	7.58	7.43	29 43.845	4.0049	− .0304	− .007	+41 17 56.42	12.184	.459	− .02	6	19.71
3553	CD−25° 6236	A3	9.6		29 45.262	2.5606	+ .0017	+ .0012	−25 45 55.35	12.186	.291	+ .027	4	18.87
3554	BD−12° 2580	F2	9.2		29 54.658	2.8264	− .0008	+ .002	−13 4 1.32	12.197	.322	− .03	4	19.38
3555	BD− 2° 2615	A0	8.4	8.54	30 17.799	3.0174	− .0035	− .0011	− 2 59 18.54	12.223	.343	− .030	4	18.48
3556	CD−27° 5635	A0	9.3	8.5	8 30 22.929	+ 2.5130	+ .0020	+ .0023	−27 51 37.37	−12.229	− .285	− .018	4	18.56
3557	BD−21° 2486	A2	7.9	7.97	30 23.851	2.6501	+ .0012	− .0040	−21 45 34.65	12.230	.301	− .009	[illegible]	18.13
3558	BD+20° 2117	G0	9.52	8.8	30 27.466	3.4537	− .0128	.000	+19 47 39.05	12.234	.393	− .10	4	18.68
3559	BD−15° 2502	K0	9.96		30 30.882	2.7836	− .0002	− .0035	−15 16 41.08	12.238	.316	+ .008	[illegible]	19.38
3560	BD+60° 1144		*9.36*		30 33.53	4.9295	− .0758	− .002	+60 19 17.12	12.241	.564	+ .04	4	18.47
3561	BD+48° 1665		9.9		8 30 38.448	+ 4.2672	− .0416	+ .004	+48 28 7.88	−12.247	− .487	− .02	4	18.85
3562	BD+13° 1944		*9.10*	8.89	30 41.600	3.3193	− .0094	− .002	+13 7 19.69	12.251	.377	+ .01	[illegible]	18.58
3563	181 B Camelop	K0	6.29	6.2	30 50.94	6.7379	− .2203	− .0043	+73 54 40.03	12.262	.772	− .105	8	18.52
3564	BD− 5° 2582	A0	9.20		31 25.544	2.9754	− .0028	+ .0005	− 5 16 16.74	12.301	.336	+ .020	4 5	18.22 18.81
3565	BD+36° 1844		*9.63*		31 39.132	3.8372	− .0246	+ .001	+35 56 45.07	12.317	.437	.00	4	18.56
3566	Grmb 1431	A0	6.69	7.07	8 32 3.23	+11.0970	− .8801	− .0060	+82 31 29.57	−12.345	−1.269	− .013	8	17.80
3567	BD+24° 1956	G5	*9.14*		32 4.997	3.5580	− .0158	− .0152	+24 44 59.12	12.347	.403	+ .018	5	17.33
3568	Brad 1202	G0	5.69	5.6	32 6.54	5.3612	− .1050	− .0019	+65 17 55.31	12.349	.610	+ .085	[illegible]	18.07
3569	CD−29° 6430	A0	7.34	6.9	32 11.043	2.4834	+ .0021	− .0006	−29 14 48.19	12.354	.280	− .002	4	17.82
3570	BD+62° 1007		*10.16*		32 37.37	5.0413	− .0841	+ .002	+61 54 25.41	12.384	.573	+ .04	4	19.12
3571	BD+32° 1764	A3	*8.63*	9.10	8 32 37.472	+ 3.7324	− .0211	.000	+32 7 17.85	−12.384	− .424	− .04	4	18.59
3572	BD+17° 1887		*8.89*	9.2	32 41.155	3.4046	− .0117	− .004	+17 32 0.37	12.388	.385	.00	4	18.68
3573	Brad 1213	A0	5.98	6.07	32 45.656	3.2567	− .0082	− .0018	+ 9 56 3.93	12.393	.368	− .022	[illegible]	17.50
3574	BD+43° 1838	A5	*9.49*	8.63	32 52.708	4.0673	− .0337	+ .001	+43 26 57.55	12.402	.461	+ .01	5	19.39
3575	BD− 6° 2658	K2	8.6	7.7	32 58.550	2.9430	− .0023	+ .002	− 7 2 36.99	12.408	.332	− .02	[illegible]	18.84
3576	Lal 17001	G5	7.06	6.44	8 33 19.824	+ 2.7240	+ .0004	− .0010	−18 24 3.72	−12.432	− .306	− .049	[illegible]	17.60
3577	27 B Urs Maj	K0	6.03	6.16	33 22.479	4.4632	− .0519	− .0026	+52 59 35.15	12.436	.505	− .032	[illegible]	18.54
3578	BD+26° 1816	G5	7.65	7.66	33 22.499	3.5915	− .0169	− .0083	+26 19 59.20	12.436	.406	− .186	4	18.07
3579	δ Hydræ	A0	4.18	4.29	33 25.299	3.1826	− .0066	− .0049	+ 5 59 1.12	12.439	.359	− .011	4	18.16
3580	BD−16° 2525	G5	8.4	8.51	33 36.316	2.7482	+ .0001	− .013	−17 12 59.51	12.451	.308	+ .05	[illegible]	18.02
3581	BD+11° 1886	K0	8.8	8.56	8 33 45.843	+ 3.2790	− .0086	.000	+11 8 50.44	−12.462	− .369	− .02	6 5	18.01 17.80
3582	BD+81° 268	G5	*9.20*		33 50.38	9.9213	− .6708	− .0198	+81 18 46.10	12.467	1.128	+ .003	4	18.91
3583	BD−21° 2523	A2	9.2		33 57.848	2.6661	+ .0009	− .0002	−21 14 28.56	12.476	.299	− .001	4	18.87
3584	BD+15° 1862	F0	7.69	7.33	34 0.914	3.3557	− .0106	+ .001	+15 8 21.67	12.479	.377	− .03	4	18.12
3585	BD+23° 1985	K0	*9.09*		34 33.538	3.5177	− .0149	− .002	+23 5 19.38	12.516	.395	− .02	4	18.13
3586	σ Hydræ	K0	4.54	4.4	8 34 34.601	+ 3.1388	− .0057	− .0012	+ 3 37 23.30	−12.518	− .352	− .020	4	18.61
3587	BD+56° 1322	G0	*8.13*	7.73	34 37.294	4.6175	− .0605	− .0339	+55 57 31.94	12.521	.520	− .375	4	18.31
3588	Fedor 1359	G5	6.96	7.06	34 53.220	4.3935	− .0490	− .0032	+51 42 45.72	12.539	.494	+ .038	5	18.44
3589	BD+75° 347	F8	8.92	9.10	34 53.43	6.9338	− .2490	− .0066	+74 53 20.54	12.539	.783	− .027	4	18.28
3590	Brad 1220	F0	6.68	6.40	35 7.008	3.4531	− .0132	− .0023	+20 3 40.05	12.555	.387	− .016	4	19.01
3591	BD+12° 1888	G5	7.9	7.32	8 35 28.458	+ 3.2904	− .0091	− .0071	+11 49 0.52	−12.579	− .368	− .521	4	18.13
3592	Brad 1214	K0	5.52	5.42	35 29.709	4.1544	− .0381	+ .0028	+46 6 56.19	12.580	.466	+ .077	4	18.67
3593	BD+39° 2137	A5	9.1	8.9	35 51.402	3.9226	− .0288	.000	+39 16 57.67	12.605	.439	+ .02	6	20.12
3594	BD+ 7° 2011	K0	6.63	6.49	35 57.808	3.1975	− .0069	− .003	+ 6 50 53.54	12.612	.357	+ .05	4	18.35
3595	BD+ 4° 2014		*8.92*	8.6	36 1.223	3.1578	− .0062	− .0015	+ 4 40 58.69	12.616	.352	+ .020	4	18.30
3596	6 Hydræ	K2	5.15	5.32	8 36 14.061	+ 2.8485	− .0009	− .0059	−12 11 30.32	−12.631	− .316	− .004	4	18.33
3597	BD+27° 1651	K2	8.5	8.5	36 14.341	3.6103	− .0179	+ .0007	+27 23 19.87	12.631	.405	− .003	5	17.75
3598	CD−23° 7604		9.6		36 18.407	2.6212	+ .0015	− .0033	−23 31 15.09	12.636	.291	+ .002	4	18.87
3599	BD−13° 2640	A0	8.0	8.02	36 28.460	2.8280	− .0006	− .0014	−13 16 57.43	12.647	.314	+ .002	4	19.32
3600	BD−10° 2595	F5	8.8		36 30.643	2.8773	− .0013	− .0052	−10 40 40.44	12.649	.320	+ .040	4	18.61

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3601	BD− 2° 2652	F0	9.1		8 36 40.146	+3.0286	−0.0037	−0.0038	− 2 26 8.18	−12.660	−0.337	−0.020	4	19.35
3602	BD+34° 1882		*9.18*	8.93	36 41.001	3.7849	− .0238	+ .001	+34 30 16.55	12.661	.423	.00	4	18.32
3603	BD− 0° 2042	G5	9.18	9.3	36 49.727	3.0684	− .0044	− .0009	− 0 14 21.63	12.671	.340	− .024	4	19.00
3604	β Pyxidis	G5	4.04		36 58.238	2.3474	+ .0028	+ .0004	−35 1 25.64	12.681	.258	− .019	4	18.04
3605	Lal 17133	A0	6.48	6.7	37 8.782	2.9132	− .0018	− .0029	− 8 46 1.57	12.693	.323	− .004	4	18.80
3606	BD+ 1° 2150	K2	*8.10*	7.43	8 37 9.033	+3.0952	− .0049	− .0018	+ 1 14 35.74	−12.693	− .344	− .010	4	18.88
3607	BD+71° 468		*8.52*	8.89	37 13.51	6.1778	− .1774	+ .0027	+71 34 54.87	12.698	.691	− .029	4	18.58
3608	BD+29° 1811	A2	*9.03*	8.58	37 16.738	3.6446	− .0190	+ .0006	+28 56 52.96	12.702	.406	− .016	4	19.19
3609	BD+24° 1975	K2	*9.07*	8.65	37 16.776	3.5470	− .0160	− .0003	+24 38 35.30	12.702	.396	− .043	4	18.97
3610	BD+59° 1186	F2	*9.27*	9.3	37 21.384	4.8037	− .0727	− .005	+59 9 34.66	12.707	.536	+ .01	4	18.55
3611	BD+ 8° 2101		9.5		8 37 29.658	+3.2279	− .0077	− .004	+ 8 32 26.07	−12.716	− .358	.00	4 5	18.68 19.17
3612	BD+63° 795		*9.45*		37 48.19	5.0947	− .0915	− .006	+62 57 47.27	12.737	.568	− .02	4	18.14
3613	BD+13° 1969	G5	9.1	9.2	37 53.380	3.3235	− .0100	− .005	+13 39 44.65	12.743	.368	− .07	4	18.41
3614	γ Cancri	A0	4.73	4.78	38 39.524	3.4833	− .0144	− .0073	+21 45 25.71	12.795	.385	− .050	85 46	19.72 19.37
3615	BD− 4° 2427	K0	8.8	8.55	38 49.562	2.9948	− .0031	+ .0015	− 4 20 8.48	12.806	.330	− .016	4	17.81
3616	η Hydræ	B3	4.32	4.75	8 39 2.622	+3.1389	− .0059	− .0015	+ 3 41 12.45	−12.821	− .346	− .002	5	18.03
3617	BD−16° 2562	F0	8.6	8.7	39 22.116	2.7608	+ .0003	− .0007	−16 54 34.07	12.842	.304	+ .008	4	18.90
3618	BD+44° 1783	F8	*8.68*	8.77	39 37.615	4.0792	− .0361	− .005	+44 28 29.89	12.860	.451	− .02	4	18.95
3619	BD− 6° 2707	A0	8.8	8.90	39 40.590	2.9481	− .0023	− .001	− 6 55 51.40	12.863	.324	− .01	4	19.44
3620	BD+84° 187	A3	*9.10*	8.6	39 42.68	12.5770	−1.2859	− .0068	+83 50 45.65	12.865	1.400	+ .027	4	18.88
3621	BD+46° 1431	F5	8.2	7.65	8 39 53.075	+4.1505	− .0394	+ .001	+46 27 46.80	−12.877	− .458	− .04	4	19.60
3622	BD+51° 1448	K0	*9.10*		[illegible]	4.3423	− .0485	+ .001	+51 7 7.21	12.884	.480	− .01	4	20.14
3623	BD+54° 1253	K5	*8.12*	8.68	40 0.901	4.4924	− .0564	− .001	+54 12 25.81	12.886	.496	− .04	4	20.16
3624	δ Cancri	K0	4.17	4.07	40 8.450	3.4141	− .0125	− .0012	+18 26 57.67	12.894	.376	− .239	61 29	19.05 18.94
3625	BD−14° 2631	K0	8.6	8.4	40 8.577	2.8029	− .0002	− .0010	−14 46 28.12	12.894	.307	.000	4	19.98
3626	CD−24° 7327	F8	9.45		8 40 8.841	+2.5953	+ .0018	− .0046	−25 0 48.87	−12.895	− .284	− .030	4	19.83
3627	BD+22° 1983	K0	8.8	8.9	40 16.188	3.4890	− .0147	− .001	+22 8 49.70	12.903	.383	− .01	4	18.59
3628	BD+64° 706 *br.*		*8.75*	8.98	40 21.52	5.2321	− .1032	− .0020	+64 39 53.04	12.909	.578	− .017	4	19.65
3629	α Pyxidis	B2	3.70		40 22.589	2.4114	+ .0027	− .0009	−32 53 50.77	12.910	.266	+ .006	4	19.64
3630	Brad 1233	K0	6.14	6.4	40 27.123	3.6865	− .0209	+ .0002	+30 59 18.75	12.915	.405	− .020	4	19.40
3631	BD+37° 1903	F0	6.91	6.97	8 40 30.269	+3.8591	− .0273	− .0037	+37 35 1.23	−12.919	− .425	− .068	4	19.56
3632	BD+73° 434	G0	*8.56*	8.73	40 31.14	6.4088	− .2052	− .0205	+72 58 17.91	12.920	.708	− .042	4	19.52
3633	Brad 1240	A2	6.00	6.09	40 47.122	3.1795	− .0068	+ .0003	+ 5 58 16.72	12.937	.349	− .003	5	18.66
3634	Lal 17283	A2	6.13	6.39	41 20.519	2.6842	+ .0011	− .0031	−20 52 37.11	12.974	.293	+ .021	4	19.36
3635	CD−29° 6691	K2	8.4		41 30.087	2.4911	+ .0026	− .0036	−29 44 15.65	12.985	.271	− .028	4	17.91
3636	ι Cancri *br.*	G5	4.20	4.18	8 41 51.543	+3.6376	− .0196	− .0015	+29 3 12.79	−13.009	− .398	− .050	4	18.53
3637	BD+18° 2037	F5	*7.99*	7.93	41 58.009	3.3988	− .0122	− .004	+17 47 20.47	13.016	.372	− .02	4	19.06
3638	BD+40° 2108		9.1		42 7.359	3.9346	− .0306	.000	+40 19 4.14	13.027	.431	− .01	6 5	19.63 20.11
3639	BD+56° 1334	F8	*10.07*		42 8.466	4.5758	− .0620	.000	+55 57 12.73	13.028	.502	− .03	4	19.13
3640	BD+52° 1337	K5	*9.08*		42 10.648	4.3923	− .0520	+ .001	+52 25 12.60	13.030	.481	.00	4	19.28
3641	Wi (1) 8^{h} 1016	K5	6.47	6.26	8 42 16.635	+2.8806	− .0013	− .0028	−10 42 52.75	−13.037	− .314	+ .015	4	18.30
3642	BD+36° 1870		*8.55*	8.32	42 18.026	3.8307	− .0266	.000	+36 45 0.20	13.038	.418	− .01	4	19.20
3643	BD+11° 1910	K	9.1	9.3	42 22.778	3.2744	− .0090	− .004	+11 14 40.48	13.044	.356	+ .02	4	19.50
3644	ε Hydræ *m.*	F8	[illegible]	3.67	42 32.445	3.1921	− .0071	− .0127	+ 6 42 47.40	13.054	.346	− .054	80 68	19.77 20.15
3645	BD−18° 2470	F2	8.0	8.23	42 36.915	2.7263	+ .0008	− .0001	−18 51 46.31	13.059	.296	− .012	4	19.16
3646	Lac 3509	•	7.32	6.52	8 42 44.341	+2.5714	+ .0022	− .0009	−26 19 11.67	−13.067	− .278	− .009	5	18.23
3647	BD+68° 541		*9.02*		42 54.93	5.5871	− .1331	+ .0036	+68 3 44.53	13.079	.611	− .008	4 5	19.10 19.51
3648	BD+49° 1772	A3	8.27	8.33	43 6.931	4.2674	− .0460	− .002	+49 44 1.55	13.092	.466	− .01	5 4	19.25 19.00
3649	BD+14° 1974		8.5	9.3	43 7.113	3.3336	− .0106	− .001	+14 27 19.79	13.092	.362	− .01	4	17.92
3650	Pi 8^{h} 167	A0	5.22	5.44	43 11.734	3.0444	− .0040	− .0031	− 1 36 11.34	13.098	.331	− .006	4	19.22
3651	BD+20° 2219	G5	*9.03*	8.7	8 43 38.107	+3.4397	− .0136	− .001	+19 58 14.66	−13.127	− .374	+ .03	4	18.75
3652	BD+33° 1762		*9.76*		44 6.904	3.7296	− .0231	+ .001	+33 5 12.79	13.159	.404	− .05	4	18.71
3653	BD+58° 1151	K0	*9.77*		44 34.729	4.6754	− .0693	− .002	+57 52 30.71	13.189	.508	+ .03	4	19.14
3654	CD−27° 5937		9.8		44 43.866	2.5499	+ .0024	+ .0016	−27 27 57.60	13.199	.274	− .017	4	19.38
3655	BD+66° 582		*8.62*		44 52.73	5.3765	− .1182	+ .0065	+66 25 40.54	13.209	.584	+ .113	4	18.60
3656	14 Hydræ	B9	5.19	6.1	8 45 20.517	+3.0176	− .0036	− .0014	− 3 8 43.19	−13.239	− .325	− .024	4	19.98
3657	BD−22° 2407	A0	8.2		45 21.118	2.6555	+ .0015	+ .0006	−22 34 38.46	13.240	.285	− .015	4	18.41
3658	BD+76° 330		*9.06*		45 22.88	7.1605	− .3007	− .0069	+76 12 37.87	13.242	.776	+ .030	4	18.97
3659	BD+26° 1848	K0	*8.58*	8.61	45 24.307	3.5762	− .0180	+ .0008	+26 39 9.13	13.243	.385	− .031	4	18.67
3660	BD+ 8° 2126	A0	*9.21*	9.2	45 32.116	3.2107	− .0075	− .003	+ 7 50 9.22	13.252	.346	− .04	5	18.05

3628. 11^{m}0, 6″8, 128°.

3636. 6^{m}2, 31″, 307°.

3644. 3^{m}7-5^{m}2, 0″2, 154°; 15.3 yrs.; 7^{m}0, 3″2, 244°

3646. K0, A3.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3661	CD−24° 7438		9.4	8.4	8 45 40.359	+2.6183	+0.0019	−0.0036	−24 23 30.04	−13.261	−0.280	−0.026	4	18.02
3662	BD+61° 1081		*9.13*		45 49.85	4.8700	− .0823	.000	+60 52 17.35	13.271	.526	− .02	4	19.09
3663	BD+18° 2054		*9.62*		45 52.648	3.4076	− .0128	− .001	+18 29 30.66	13.274	.366	.00	5	20.11
3664	BD−11° 2468	A0	8.2	8.32	45 52.910	2.8570	− .0008	+ .0012	−12 9 22.61	13.275	.307	− .006	4	18.80
3665	BD+32° 1796	K0	9.1	9.1	46 25.817	3.6985	− .0223	.000	+32 3 28.07	13.311	.397	+ .01	4	18.68
3666	Brad 1250	G0	6.29	6.6	8 46 34.241	+3.3525	− .0113	− .0079	+15 38 53.39	−13.320	− .359	+ .068	4	19.00
3667	Brad 1247	G5	5.24	5.4	46 35.076	4.0379	− .0362	+ .0001	+44 1 31.81	13.321	.434	+ .037	4	17.36
3668	Pi 8^h 188	G5	5.98	6.12	46 40.981	2.5156	+ .0027	− .0022	−29 9 52.22	13.327	.268	+ .003	5 6	18.24 18.57
3669	BD−14° 2669	A2	7.8	8.43	46 42.896	2.8180	− .0002	− .0018	−14 18 52.45	13.329	.300	− .016	4	18.92
3670	Rümker 2653	F0	6.08	6.26	46 47.617	4.7570	− .0756	+ .0024	+59 21 25.19	13.334	.512	− .008	4	19.06
3671	*b* Urs Maj	F0	5.72	5.7	8 46 47.90	+4.9702	− .0898	− .0014	+62 15 46.05	−13.335	− .535	+ .019	4	18.86
3672	BD− 4° 2471	K0	9.0	8.52	46 50.186	2.9922	− .0030	+ .0005	− 4 36 50.65	13.337	.320	− .063	4	18.46
3673	BD− 6° 2740	F0	8.8	8.9	46 51.348	2.9544	− .0024	.000	− 6 45 52.40	13.338	.315	.00	4	18.83
3674	BD+35° 1883		*8.51*	8.6	47 7.190	3.7842	− .0256	+ .004	+35 31 38.13	13.356	.406	− .01	4	18.37
3675	γ Pyxidis	K2	4.19	4.65	47 8.239	2.5559	+ .0025	− .0103	−27 24 45.42	13.357	.272	+ .081	4	19.63
3676	BD+22° 2006	K0	*8.82*	8.6	8 47 24.841	+3.4811	− .0151	− .001	+22 18 30.46	−13.375	− .373	− .02	4	19.39
3677	BD+24° 2000	F5	*9.43*		47 32.306	3.5163	− .0162	− .0002	+24 1 42.57	13.383	.376	− .033	4	19.17
3678	BD+ 4° 2059		*8.74*	8.70	47 36.945	3.1524	− .0063	− .0002	+ 4 34 54.76	13.388	.336	+ .001	4	18.70
3679	ρ² Cancri	K0	6.06	5.90	47 50.187	3.6154	− .0196	− .0365	+28 38 14.47	13.402	.386	− .244	4	18.39
3680	BD+62° 1028	F5	*8.60*	8.53	47 59.65	4.9796	− .0914	− .001	+62 29 19.84	13.412	.534	+ .02	4 5	18.89 19.35
3681	Fedor 1373	F0	7.40	7.25	8 48 1.93	+7.9321	− .4138	− .0063	+78 27 4.44	−13.415	− .853	− .002	4	18.97
3682	BD+42° 1940	K5	*8.55*	8.26	48 9.422	3.9754	− .0338	+ .0001	+42 17 16.74	13.423	.425	+ .007	5	19.60
3683	BD+47° 1620		*9.54*		48 14.804	4.1598	− .0425	− .005	+47 36 53.96	13.429	.444	− .02	4	18.95
3684	BD+ 0° 2409		*9.38*	9.2	48 23.868	3.0811	− .0046	− .0025	+ 0 29 4.86	13.439	.327	.000	4	18.98
3685	BD− 9° 2679	A2	8.4		48 37.156	2.9042	− .0015	− .002	− 9 39 5.38	13.453	.308	− .01	4	19.45
3686	BD+12° 1931		*9.47*		8 48 37.662	+3.2955	− .0098	.000	+12 40 19.92	−13.454	− .350	+ .03	4	19.87
3687	BD+ 9° 2076	G0	8.4	8.66	48 42.162	3.2383	− .0084	+ .0062	+ 9 29 36.22	13.459	.344	− .264	4	19.19
3688	BD+53° 1290	K0	*7.90*	8.45	49 6.290	4.3974	− .0553	− .001	+53 15 36.46	13.485	.468	− .01	4	19.01
3689	BD+ 5° 2076 *br.*	A	*8.92*	8.9	49 13.410	3.1681	− .0067	− .002	+ 5 30 56.80	13.492	.336	.00	4	19.65
3690	σ² Cancri *m.*	K0	5.60	5.5	49 22.019	3.6635	− .0215	+ .0030	+30 52 59.94	13.501	.390	− .033	4	19.13
3691	BD−16° 2618	K0	6.62	6.6	8 49 23.386	+2.7774	+ .0003	− .0040	−16 38 54.99	−13.503	− .294	− .064	4	19.63
3692	BD+43° 1863		*9.76*		49 35.703	4.0015	− .0355	− .004	+43 15 52.41	13.516	.425	− .01	5	19.76
3693	BD+20° 2234	M0	*8.21*	7.75	49 40.782	3.4294	− .0136	+ .001	+19 52 47.24	13.522	.364	− .03	4	19.52
3694	BD+ 2° 2088 *m.*	F0	7.16	6.8	49 43.295	3.1094	− .0053	− .0001	+ 2 7 43.63	13.524	.329	− .057	4	20.13
3695	BD+65° 672		*8.64*	8.74	49 50.24	5.2041	− .1095	− .0022	+65 10 35.79	13.532	.554	+ .008	4	19.80
3696	BD− 0° 2087	K2	8.43	8.34	8 49 53.622	+3.0674	− .0045	− .0028	− 0 18 29.43	−13.535	− .324	− .003	4	20.20
3697	BD+50° 1591	K5	*8.57*	8.87	50 2.416	4.2527	− .0479	+ .001	+50 8 38.04	13.545	.451	− .03	4	18.94
3698	BD+71° 483		*9.12*	9.2	50 10.15	6.0529	− .1855	− .0057	+71 43 2.28	13.553	.644	− .043	5	20.19
3699	Lal 17586 *br.*	*	7.68	7.83	50 20.837	2.9264	− .0018	− .0031	− 8 27 24.15	13.565	.308	.000	4	18.33
3700	BD+25° 2011	K0	*9.63*		51 8.514	3.5378	− .0174	+ .0038	+25 22 25.44	13.616	.371	+ .019	4	19.07
3701	ζ Hydræ	K0	3.30	3.27	8 51 9.973	+3.1801	− .0070	− .0069	+ 6 15 3.03	−13.617	− .334	+ .009	59 45	18.63 19.02
3702	BD+55° 1299	K0	*8.40*	8.4	51 11.236	4.4725	− .0606	.000	+54 59 17.29	13.619	.473	− .03	4	18.84
3703	BD+46° 1459	K0	5.92	5.8	51 25.361	4.0850	− .0398	− .0105	+45 56 21.82	13.634	.431	− .046	4	18.95
3704	Lal 17636	K0	5.90	5.42	51 31.816	2.7558	+ .0008	+ .0013	−17 56 8.14	13.640	.288	− .014	4	18.62
3705	60 Cancri	K0	5.70	5.51	51 33.564	3.2796	− .0096	− .0002	+11 55 57.12	13.643	.345	− .021	5	17.16
3706	BD−11° 2495	A2	9.4	8.8	8 51 35.275	+2.8665	− .0008	− .0005	−11 53 44.74	−13.644	− .300	+ .015	4	19.60
3707	BD+34° 1918		*9.71*	9.3	51 39.956	3.7481	− .0251	.000	+34 36 40.34	13.649	.395	+ .03	4	18.18
3708	BD+67° 569	G0	*8.80*	8.7	51 54.15	5.4197	− .1291	+ .0024	+67 23 3.41	13.665	.572	− .007	4	18.84
3709	BD−22° 2442		9.6	ft.	52 14.867	2.6674	+ .0017	+ .0009	−22 32 33.20	13.687	.279	+ .001	4	19.49
3710	BD+13° 2013		*9.51*	8.9	52 22.121	3.3087	− .0104	− .002	+13 35 44.87	13.694	.346	+ .02	4 5	18.72 19.03
3711	Wi (2) 8^h 1205	G5	7.01	6.98	8 52 28.022	+3.4702	− .0152	− .0002	+22 10 5.68	−13.701	− .363	− .004	4	18.84
3712	BD−20° 2719		9.6		52 28.176	2.7068	+ .0013	− .0002	−20 33 34.68	13.701	.283	+ .010	4	20.27
3713	BD+56° 1351	G5	*8.12*	7.71	52 29.124	4.5281	− .0646	− .005	+56 10 13.33	13.702	.476	− .02	4	19.23
3714	BD− 1° 2163	A2	8.4	8.71	52 38.643	3.0375	− .0039	− .0003	− 2 4 0.72	13.712	.317	− .021	4	18.81
3715	BD+69° 496		*9.43*		52 40.62	5.6610	− .1513	+ .0025	+69 21 55.77	13.714	.596	− .013	4 5	19.24 19.62
3716	BD+16° 1862	G0	7.9	7.66	8 52 49.908	+3.3629	− .0120	.000	+16 35 26.76	−13.724	− .352	.00	4	19.18
3717	BD+40° 2127		*9.44*		53 3.548	3.9032	− .0319	− .008	+40 28 36.09	13.738	.409	− .11	4	18.81
3718	BD+27° 1696 *br.*	A0	*9.08*		53 22.850	3.5652	− .0186	− .0005	+26 52 23.38	13.759	.373	− .028	4	18.41
3719	BD+33° 1789	Ma	*7.91*	7.95	53 24.050	3.7160	− .0242	+ .003	+33 30 16.79	13.760	.388	− .03	4	18.49
3720	BD+61° 1093	A0	*9.00*	8.73	53 39.27	4.8540	− .0867	− .006	+61 24 43.33	13.776	.508	− .08	4	18.11

3689. $11^{m}1$, 5″0, 227°.
3690. $6^{m}1$-$6^{m}6$, 1″5, 323°.
3694. $7^{m}29$ $9^{m}5$, 0″3, 109°.
3699. F0, A2; $9^{m}1$, 1″1, 175°.
3718. $11^{m}0$, 1″1, 107°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3721	ι Urs Maj. . . . . *br.*	A5	3.12	3.1	8 53 44.339	+4.1640	−0.0446	−0.0438	+48 21 24.31	−13.782	−0.435	−0.248	5	18.43
3722	BD+ 7° 2052		*9.51*		53 44.676	3.1995	− .0076	+ .001	+ 7 26 33.45	13.782	.333	+ .01	4	18.54
3723	BD+70° 541.	A2	*9.05*		54 5.17	5.7502	− .1616	− .0037	+70 6 15.92	13.804	.602	− .022	4	18.78
3724	α Cancri	A3	4.27	4.38	54 6.801	3.2816	− .0098	+ .0025	+12 10 5.81	13.805	.341	− .039	76 64	19.53 19.83
3725	CD−24° 7584.	K0	7.38	7.47	54 9.538	2.6306	+ .0023	+ .0056	−24 31 52.70	13.808	.272	− .043	4	19.38
3726	BD+ 3° 2107.		*9.57*		8 54 25.489	+3.1262	− .0058	+ .0010	+ 3 9 54.20	−13.825	− .324	− .057	4	18.13
3727	CD−26° 6621.	K5	8.2	8.5	55 21.151	2.5795	+ .0028	− .0001	−27 5 54.33	13.884	.266	− .004	4	18.83
3728	ρ Urs Maj	Ma	4.99	5.0	55 21.24	5.4516	− .1357	− .0026	+67 56 34.04	13.884	.568	+ .015	12	18.50
3729	Grmb 1496.	K5	6.54	5.8	55 25.882	3.8233	− .0291	− .0006	+37 54 59.29	13.889	.396	− .009	4	18.54
3730	10 Urs Maj.	F5	4.09	4.07	55 27.279	3.9433	− .0343	− .0388	+42 6 2.53	13.890	.408	− .260	4	17.82
3731	BD− 4° 2506.	K0	8.4	8.55	8 55 31.005	+3.0010	− .0031	+ .0022	− 4 15 25.70	−13.894	− .309	− .028	4	18.28
3732	BD+54° 1270 . . .	G5	*8.16*	8.38	55 32.429	4.3906	− .0578	− .003	+53 50 21.48	13.896	.455	− .02	4	18.06
3733	BD+29° 1851. . . .	K5	*7.73*	7.67	55 32.841	3.6062	− .0204	+ .0025	+28 58 51.19	13.896	.373	− .011	4	17.80
3734	BD+21° 1956.	K2	*8.71*	8.8	55 53.742	3.4431	− .0148	− .003	+21 3 40.23	13.918	.355	− .04	5	17.52
3735	BD+63° 815. . . .		*8.72*	8.86	55 59.45	5.0059	− .0996	− .008	+63 33 35.93	13.924	.519	.00	4	17.99
3736	BD−13° 2735 . .	F0	8.6	8.20	8 56 15.032	+2.8294	− .0001	+ .0006	−14 12 58.48	−13.940	− .291	.000	4	18.65
3737	BD+32° 1829. . . . . . . *br.*	A2	5.98	5.8	56 29.986	3.6854	− .0235	− .0004	+32 33 57.04	13.956	.380	− .005	4	18.63
3738	BD+45° 1666.	A3	*8.91*	8.87	56 33.681	4.0469	− .0395	+ .002	+45 27 4.44	13.960	.417	+ .02	4	18.54
3739	BD+36° 1897.	F5	*7.9*	7.87	56 43.026	3.7735	− .0271	− .009	+36 10 27.36	13.970	.388	− .05	4	17.62
3740	CD−28° 6813 . . .	A0	8.8		56 46.121	2.5465	+ .0031	.0000	−28 46 52.34	13.973	.261	− .016	4	18.81
3741	BD− 5° 2689. . . .	A2	8.4	9.1	8 56 57.456	+2.9728	− .0026	− .002	− 5 57 25.61	−13.985	− .305	− .03	4	18.30
3742	BD+ 1° 2220. . . .	A0	*7.52*	7.50	56 58.630	3.0994	− .0052	− .0027	+ 1 35 37.68	13.986	.318	− .007	4	18.29
3743	BD−17° 2712. . . .	A0	8.6	8.7	57 6.164	2.7612	+ .0009	− .0045	−18 1 58.52	13.994	.283	+ .013	4	18.15
3744	BD+17° 1990. . .	B9	7.11	7.43	57 14.362	3.3723	− .0125	− .002	+17 23 44.25	14.002	.346	.00	4	18.13
3745	BD+ 6° 2089. . .	F0	7.8	7.47	57 35.777	3.1725	− .0070	− .004	+ 5 58 0.24	14.025	.325	− .02	4	18.71
3746	BD+31° 1923. . .	K5	*8.06*	7.68	8 57 49.777	+3.6614	− .0228	+ .0010	+31 40 51.01	−14.039	− .375	− .047	4	17.95
3747	Pulk (55) 1436. .	K0	5.80	5.69	57 52.772	3.0699	− .0045	− .0031	− 0 10 9.47	14.042	.314	+ .079	4	18.67
3748	BD+49° 1798. . .		9.3	8.9	58 2.465	4.1831	− .0472	+ .003	+49 21 39.74	14.052	.429	− .03	4 5	17.78 17.62
3749	BD− 7° 2701 .	K0	7.31	7.21	58 2.517	2.9378	− .0019	.000	− 8 3 27.75	14.052	.302	− .04	4	18.41
3750	ν Cancri.	A0	5.45	5.53	58 3.812	3.5124	− .0173	.0000	+24 46 7.08	14.054	.358	− .005	4	19.17
3751	44 B Urs Maj.	A2	5.68	5.75	8 58 9.304	+4.4130	− .0604	+ .0004	+54 36 0.87	−14.060	− .453	− .002	4	18.87
3752	κ Urs Maj . . . . *m*	A0	3.68		58 10.255	4.1112	− .0433	− .0030	+47 28 26.49	14.061	.421	− .066	4	18.60
3753	BD− 9° 2112 .	A2	8.0	8.3	58 20.024	3.2201	− .0083	− .003	+ 8 47 59.89	14.071	.328	.00	4 5	18.87 19.14
3754	BD−16° 2667		10.0		58 33.790	2.7861	+ .0007	− .0015	−16 46 24.96	14.085	.283	+ .013	4	17.87
3755	BD+ 0° 2451. . . *br.*	B9	7.82	8.41	58 44.124	3.0847	− .0049	− .0015	+ 0 43 27.43	14.096	.314	+ .005	4	18.14
3756	BD+14° 2018.	K0	7.8	8.16	8 58 53.526	+3.3183	− .0111	− .002	+14 30 1.74	−14.105	− .338	− .02	4	18.18
3757	Rad (45) 2218	F0	6.26	6.4	58 54.67	12.9423	−1.6306	+ .0100	+84 30 19.23	14.107	1.334	+ .019	8	17.71
3758	BD+19° 2147	G5	*8.45*	8.36	59 21.034	3.3991	− .0136	− .002	+19 0 15.58	14.134	.345	− .04	4	18.36
3759	BD+44° 1820. . .	F5	*7.81*	7.85	59 33.513	3.9798	− .0372	− .0107	+43 46 33.02	14.147	.405	− .065	4	18.77
3760	BD+11° 1974. . . .	K0	*8.09*	7.99	59 36.757	3.2648	− .0095	.000	+11 28 18.73	14.150	.331	− .05	4	18.52
3761	Wi (1) 8^h 1442	A0	6.74	7.1	8 59 44.225	+2.9924	− .0028	− .0002	− 4 51 14.94	−14.158	− .303	− .004	4	18.01
3762	BD−11° 2537. . . .	F0	8.4	8.71	59 45.718	2.8675	− .0006	− .0068	−12 14 24.42	14.159	.290	+ .038	4	18.57
3763	BD+39° 2197. . . .		*8.65*	8.63	59 46.518	3.8342	− .0304	+ .002	+38 50 7.93	14.160	.388	− .04	4	18.14
3764	BD−22° 2479 . .	A2	8.36	8.6	8 59 54.107	2.6776	+ .0021	− .0009	−22 40 50.06	14.168	.270	.000	4	18.46
3765	BD−19° 2605. . . .	F8	8.6		9 0 8.618	2.7382	+ .0014	− .0055	−19 30 24.85	14.183	.276	− .026	4	19.08
3766	BD+77° 355	F0	*8.82*		9 0 18.65	+7.3054	− .3624	− .0040	+77 25 54.37	−14.192	− .746	− .034	4	18.85
3767	BD+26° 1895	K2	*7.68*	7.98	0 22.014	3.5428	− .0186	− .0012	+26 29 3.23	14.197	.358	− .036	4	18.31
3768	BD− 9° 2732		*9.4*		0 35.318	2.9103	− .0013	− .002	− 9 46 40.26	14.210	.293	+ .02	4	18.85
3769	BD+22° 2048	K5	*9.56*		0 41.824	3.4509	− .0153	− .002	+21 52 18.97	14.217	.349	.00	4	19.03
3770	BD+57° 1199	K2	*9.20*	8.9	0 43.739	4.5589	− .0710	− .008	+57 38 4.65	14.219	.463	− .06	4	18.83
3771	BD− 1° 2194	K5	8.6	8.46	9 0 44.533	+3.0416	− .0039	+ .0005	− 1 53 20.68	−14.220	− .306	− .016	5	17.74
3772	BD+86° 130		*9.35*		0 49.43	16.252	−2.851	− .0234	+85 54 49.72	14.225	1.663	− .015	5	18.32
3773	BD+74° 387. .		*9.05*		1 5.61	6.4566	− .2505	+ .0030	+74 28 7.12	14.242	.656	+ .012	4	18.41
3774	145 B Lyncis.	G5	4.71	4.78	1 26.719	3.8260	− .0305	− .0025	+38 46 22.64	14.263	.385	− .020	5	19.70
3775	CD−24° 7093	Md	Var.		1 33.431	2.6307	+ .0026	− .0006	−24 46 9.79	14.270	.263	− .038	4	19.85
3776	BD+52° 1362	K0	7.33		9 1 33.584	+4.2717	− .0536	− .0026	+51 57 3.64	−14.270	− .431	− .026	4	18.78
3777	ω Hydrae.	K0	5.41	5.39	1 45.726	3.1616	− .0068	− .0014	+ 5 24 45.87	14.283	.318	− .003	4	18.81
3778	BD−14° 2741	A2	8.6	8.0	1 51.894	2.8345	.0000	− .0009	−14 15 24.08	14.289	.284	+ .021	4	18.64
3779	BD+65° 694		*9.5*		2 24.81	5.1260	− .1151	− .0034	+65 32 23.32	14.323	.517	+ .047	4	18.36
3780	BD+23° 2045	A2	*8.6*	8.0	2 24.987	3.4821	− .0166	.003	+23 38 54.86	14.323	.349	.00	4	18.16

3721. 10^m, 7″1, 2°
3737. 8^{m}1, 4″8, 136°

3752. 4^{m}4 4^{m}4, 0″2, 263°.
3755. 11^{m}8, 4″4, 90°.

3775. 8^{m}2 to 13^{m}0.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3781	BD+10° 1937		8.5	8.7	9 2 36.741	+3.2405	−0.0090	−0.003	+10 11 41.17	−14.335	−0.324	0.00	4	18.38
3782	BD+47° 1642	K0	*7.34*	7.38	2 39.716	4.1007	− .0442	− .003	+47 44 43.72	14.338	.412	.00	4	18.74
3783	BD+37° 1943	F5	*8.23*	7.83	2 42.517	3.7865	− .0288	− .004	+37 23 50.52	14.341	.379	− .05	4 3	17.90 18.91
3784	BD+ 3° 2144	F2	6.56	6.92	3 7.239	3.1200	− .0058	.0000	+ 2 54 11.87	14.366	.311	+ .006	4	18.51
3785	τ Cancri	G5	5.38	5.4	3 12.094	3.6101	− .0216	− .0020	+29 58 36.32	14.371	.361	− .009	4	19.05
3786	BD+41° 1922	K5	*8.33*	8.52	9 3 17.841	+3.8957	− .0340	− .002	+41 28 5.29	−14.377	− .389	.00	4	18.57
3787	σ^{2} Urs Maj br.	F8	4.92	5.44	3 22.42	5.3158	− .1326	− .0009	+67 27 37.84	14.381	.534	− .070	12 13	19.31 19.14
3788	κ Cancri	B8	5.14	5.09	3 24.928	3.2535	− .0094	− .0013	+10 59 27.52	14.384	.324	− .011	97 73	19.69 19.87
3789	BD+12° 1973 br.	K0	7.36	7.46	3 51.392	3.2748	− .0100	− .008	+12 16 23.69	14.411	.326	− .08	4	18.12
3790	CD−28° 6943		9.7		4 5.173	2.5724	+ .0034	− .0012	−28 19 59.00	14.424	.254	− .015	5	19.22
3791	Brad 1286	G5	5.96	5.95	9 4 5.202	+3.5447	− .0191	− .0087	+26 57 40.44	−14.425	− .353	− .387	4	17.69
3792	BD+59° 1223	F5	8.21	8.46	4 16.660	4.6517	− .0796	− .0110	+59 34 46.24	14.436	.464	+ .013	4 5	19.13 19.35
3793	τ Urs Maj	*	4.74	5.1	4 20.41	4.9597	− .1030	+ .0153	+63 50 24.58	14.440	.495	− .069	4	19.77
3794	BD+48° 1729	G5	*9.59*		4 23.390	4.1194	− .0459	+ .002	+48 28 47.45	14.443	.410	− .04	4	18.66
3795	BD−15° 2710	K0	8.8	8.7	4 26.992	2.8040	+ .0006	+ .0044	−16 10 25.60	14.447	.277	− .013	4	18.55
3796	κ Pyxidis br.	K5	4.82	4.97	9 4 32.114	+2.6303	+ .0029	+ .0029	−25 32 5.90	−14.452	− .260	− .008	4	19.56
3797	ξ Cancri	G5	5.22	5.25	4 45.738	3.4534	− .0159	+ .0003	+22 22 11.45	14.466	.343	− .007	4	18.36
3798	BD+ 2° 2149		*9.21*	8.6	4 57.586	3.1136	− .0056	− .0009	+ 2 31 54.04	14.478	.308	− .010	4	18.88
3799	BD− 5° 2732	A3	8.7	8.65	5 5.548	2.9815	− .0026	+ .001	− 5 38 12.38	14.483	.294	+ .01	5	18.29
3800	BD+16° 1913 m.	A2	*8.80*	8.5	5 10.614	3.3448	− .0122	− .002	+16 25 2.57	14.491	.332	+ .01	4	18.63
3801	Lac 3692	A2	6.20	6.59	9 5 14.626	+2.6136	+ .0031	− .0040	−26 26 36.12	−14.495	− .257	+ .013	4	18.84
3802	BD− 7° 2735	B9	8.2	7.83	5 18.647	2.9454	− .0018	− .002	− 7 51 23.23	14.499	.291	− .02	4	19.21
3803	BD−17° 2763	K0	8.8	8.6	5 19.990	2.7747	+ .0011	− .0030	−17 53 56.98	14.500	.273	+ .023	4	19.10
3804	Paris 11266	K0	5.81	6.27	5 21.324	2.8761	− .0006	+ .0003	−12 1 58.71	14.501	.283	− .024	4	19.04
3805	BD+ 5° 2129		9.2		5 29.381	3.1551	− .0067	− .0038	+ 5 6 11.66	14.510	.311	− .010	4	19.40
3806	Lal 18097	K0	7.42	7.33	9 5 31.602	+2.7261	+ .0018	+ .0004	−20 36 8.52	−14.512	− .268	+ .008	4	18.90
3807	BD+35° 1952		9.5		5 37.345	3.7164	− .0263	− .003	+34 56 16.68	14.517	.368	− .05	4	19.09
3808	BD− 9° 2755	K2	7.64	7.63	5 47.506	2.9168	− .0013	− .001	− 9 36 44.20	14.528	.287	− .03	4	19.06
3809	BD+46° 1476		*9.96*		6 2.323	4.0380	− .0421	− .004	+46 23 10.47	14.542	.399	− .01	4	18.42
3810	BD+67° 579	A2	*8.94*	9.5	6 8.93	5.3063	− .1348	− .0077	+67 37 47.41	14.549	.526	− .001	4	18.84
3811	BD+40° 2168	K2	7.71	7.63	9 6 10.720	+3.8612	− .0331	− .002	+40 37 37.53	−14.551	− .381	.00	4	18.98
3812	CD−29° 7188		9.7	ft.	6 17.418	2.5435	+ .0038	− .0012	−29 56 44.60	14.558	.249	− .020	4	18.72
3813	BD+33° 1817		9.1	9.28	6 22.542	3.6748	− .0247	.000	+33 14 59.90	14.563	.362	.00	4	18.31
3814	ε Pyxidis	A3	5.56	5.33	6 32.967	2.5421	+ .0038	− .0001	−30 2 17.36	14.573	.249	− .038	4	18.67
3815	CD−23° 8112		10.2		6 37.111	2.6674	+ .0026	+ .0028	−23 50 29.58	14.577	.260	− .051	5	18.65
3816	BD+56° 1371	K0	*8.40*	8.3	9 6 37.596	+4.4653	− .0681	+ .003	+56 37 45.37	−14.578	− .441	+ .02	4	18.58
3817	BD+79° 300	B3	8.05	7.94	6 41.77	8.0745	− .5110	+ .0031	+79 36 42.93	14.582	.801	+ .014	4	19.23
3818	BD+15° 1999	G5	9.29		7 21.097	3.3143	− .0114	− .005	+14 48 17.90	14.621	.325	− .01	4	18.15
3819	BD+50° 1621	K0	*9.22*		7 22.997	4.1655	− .0497	− .003	+50 5 27.64	14.623	.408	− .05	4	18.43
3820	Brad 1296	A0	6.75	7.3	7 27.441	3.3762	− .0134	− .0024	+18 22 21.45	14.628	.330	− .030	4	18.64
3821	BD+ 4° 2137		9.2		9 7 31.323	+3.1349	− .0062	.0000	+ 3 53 40.53	−14.632	− .307	+ .020	4	18.68
3822	BD+30° 1829	F5	*8.59*	8.0	7 32.398	3.6135	− .0223	− .0011	+30 37 41.76	14.633	.354	− .014	4	18.35
3823	BD− 1° 2217	K0	9.2	8.7	7 48.041	3.0423	− .0039	− .0006	− 1 54 24.71	14.648	.296	− .028	4 5	19.56 18.83
3824	BD+15° 2003	G5	6.40	6.56	7 55.038	3.3225	− .0117	− .0363	+15 19 8.31	14.655	.324	+ .236	4 5	18.66 17.96
3825	BD+21° 1988	G0	*8.64*	8.66	8 9.375	3.4224	− .0151	− .003	+21 0 15.31	14.669	.334	− .08	4	18.86
3826	BD+73° 453		*8.72*	8.53	9 8 15.74	+6.1554	− .2286	− .0073	+73 32 57.09	−14.677	− .605	− .004	5	19.66
3827	36 Lyncis	B8	5.30	5.45	8 34.657	3.9367	− .0375	− .0021	+43 32 54.56	14.695	.385	− .047	4	17.76
3828	BD+24° 2054	K0	7.81	7.41	8 54.676	3.4886	− .0175	− .0026	+24 37 23.91	14.714	.339	− .008	4	17.64
3829	BD+53° 1321 n. f.	K2	*7.72*	7.34	8 58.074	4.2781	− .0571	− .1715	+53 1 54.64	14.718	.417	− .680	5	19.30
3830	BD+78° 302		*9.05*		9 20.60	7.5844	− .4372	+ .0102	+78 38 59.14	14.740	.743	+ .020	4 5	19.06 19.30
3831	BD+ 8° 2186	F5	8.5	8.64	9 9 28.456	+3.1986	− .0080	− .003	+ 7 55 59.06	−14.748	− .310	− .03	4	18.53
3832	BD− 3° 2612	F8	9.7	8.6	9 34.937	3.0156	− .0033	− .0026	− 3 36 39.23	14.754	.292	− .019	5 4	19.07 18.79
3833	BD−13° 2788	K2	9.0	8.6	9 43.269	2.8479	+ .0002	.0000	−13 57 57.54	14.762	.275	.000	5	18.86
3834	θ Hydræ	A0	3.84	4.05	10 12.189	3.1145	− .0057	+ .0087	+ 2 39 9.33	14.791	.300	− .312	112 90	19.69 19.70
3835	BD+36° 1938		*9.38*		10 19.415	3.7326	− .0279	− .004	+36 12 24.55	14.798	.361	− .08	4	18.56
3836	Brad 1297	A5	4.89	5.30	9 10 26.509	+4.3289	− .0610	+ .0070	+54 21 11.78	−14.805	− .419	+ .060	4	18.30
3837	CD−25° 6999	K5	8.9	8.37	11 2.576	2.6415	+ .0032	− .0002	−25 38 25.48	14.840	.253	− .024	4 5	18.64 17.97
3838	BD−21° 2735	A0	8.2	7.8	11 14.129	2.7111	+ .0024	+ .0005	−21 56 50.74	14.852	.260	+ .015	4	18.46
3839	BD− 7° 2767	F5	9.9		11 27.798	2.9521	− .0018	− .001	− 7 39 46.76	14.865	.282	− .01	4 5	19.16 18.37
3840	BD+10° 1965	A2	*8.21*	8.1	11 30.672	3.2422	− .0094	− .004	+10 42 25.93	14.868	.311	− .02	4	18.15

3787. $8^{m}2$, 1″1, 112°.
3789. 14^{m}, 2″6, 6°.

3793. F5, A5.
3796. $10^{m}1$, 2″1, 263°.

3800. $9^{m}5$–$9^{m}5$, 0″2, 228°.
3829. $7^{m}7$, 19″, 250°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3841	BD+32° 1856		*9.48*	9.1	9 11 37.395	+3.6365	−0.0237	+0.002	+32 11 0.33	−14.874	−0.348	−0.02	4	18.63
3842	Grmb 1522	G5	6.54	6.41	11 42.86	6.2699	−.2498	−.0088	+74 21 14.45	14.880	.607	−.073	8	17.82
3843	BD+43° 1901	K0	*8.24*	8.20	11 51.874	3.9194	−.0375	−.001	+43 25 9.95	14.889	.376	+.02	4	18.71
3844	BD+19° 2187	A3	6.87	7.28	11 57.842	3.3832	−.0140	−.0121	+19 8 40.03	14.894	.323	−.013	5	17.93
3845	BD+71° 497		*9.02*	8.9	12 0.33	5.7346	−.1862	−.0077	+71 25 51.96	14.897	.553	−.019	4	[illegible]
3846	BD+25° 2073 *br.*	K0	*8.64*	8.58	9 12 6.810	+3.4889	−.0179	−.0015	+24 58 19.76	−14.903	−.334	+.005	4	18.19
3847	Pi 9ʰ 19	A0	5.70	5.8	12 9.547	4.0360	−.0439	+.0020	+47 9 5.72	14.906	.387	+.008	4	18.84
3848	Lac 3750	K2	7.04		12 15.051	2.4929	+.0046	+.0024	−32 59 24.20	14.911	.237	−.033	5	20.70
3849	BD+40° 2183		*9.50*		12 24.714	3.8207	−.0326	+.002	+39 58 1.62	14.920	.366	+.01	4	18.54
3850	CD−27° 6415	K0	8.09		12 25.215	2.6008	+.0038	−.0046	−27 52 12.01	14.921	.247	+.037	4	17.78
3851	BD+61° 1111	A2	*8.50*	8.83	9 12 29.50	+4.6968	−.0886	−.006	+61 13 20.87	−14.925	−.451	+.03	4	18.44
3852	Wi (1) 9ʰ 175 *br.*	F5	6.56	6.93	12 33.480	3.0893	−.0050	−.0061	+1 3 49.75	14.929	.294	−.022	4	17.68
3853	Brad 1307	K0	5.40	5.65	12 43.375	2.9788	−.0024	+.0003	−6 1 7.34	14.939	.283	.000	5	19.68
3854	BD+46° 1490	A3	[illegible]	8.7	12 57.670	4.0102	−.0428	.000	+46 29 19.23	14.953	.383	+.03	4	19.22
3855	BD+13° 2066	K0	8.7	8.51	12 59.335	3.2850	−.0107	−.002	+13 25 0.57	14.954	.313	−.04	4	19.04
3856	CD−29° 7291	K0	8.7	7.7	9 13 6.704	+2.5635	+.0042	−.0072	−29 47 43.17	−14.961	−.242	−.059	4	19.38
3857	Wi (2) 9ʰ 185	K0	7.13	7.45	13 9.746	3.4577	−.0168	−.0055	+23 24 52.13	14.964	.329	−.015	4	18.18
3858	BD+28° 1732	F5	*9.11*	9.3	13 18.747	3.5548	−.0207	+.0020	+28 29 2.87	14.973	.339	−.002	4	18.96
3859	BD+ 7° 2105		9.2	8.9	13 19.860	3.1910	−.0078	−.004	+7 35 13.39	14.974	.303	.00	4	19.55
3860	BD+22° 2073	G5	*9.65*		13 36.483	3.4266	−.0156	−.001	+21 44 54.64	14.990	.325	−.01	4	18.54
3861	38 Lyncis *br.*	A2	4.00	4.40	9 13 52.220	+3.7438	−.0291	−.0021	+37 8 31.47	−15.005	−.355	−.135	4	19.59
3862	BD−18° 2636	F8	8.6	8.53	13 56.470	2.7639	+.0018	−.0057	−19 13 12.47	15.010	.261	+.018	4	18.53
3863	BD+76° 348	A0	*8.52*	8.06	14 2.39	6.6289	−.3039	−.0066	+76 1 13.00	15.015	.634	+.033	5	19.58
3864	BD+60° 1181	K0	7.46	7.94	14 22.83	4.6109	−.0832	+.0057	+60 7 9.08	15.035	.438	−.027	4	18.52
3865	83 Cancri	F5	6.60	6.06	14 31.117	3.3605	−.0134	−.0081	+18 2 43.53	15.043	.318	−.138	4	19.62
3866	BD+29° 1887	K5	[illegible]		9 14 39.461	+3.5752	−.0218	+.0006	+29 39 13.35	−15.051	−.338	−.036	5	17.65
3867	BD+41° 1948		9.0	9.1	14 43.237	3.8478	−.0345	+.005	+41 18 2.31	15.055	.367	+.01	4	18.79
3868	BD−17° 2816		9.7	ft.	14 58.033	2.7886	+.0015	+.0006	−17 52 7.54	[illegible]	.261	+.004	5	18.70
3869	BD+38° 2022	K0	7.9	7.72	15 6.877	3.7630	−.0304	+.003	+38 5 38.43	15.077	.355	−.04	5	17.76
3870	BD+15° 2022		9.0		15 12.404	3.3190	−.0120	.000	+15 37 53.14	15.083	.312	−.04	4	18.32
3871	Lal 18396	A0	6.91	7.09	9 15 12.950	+2.8126	+.0010	−.0002	−16 27 46.57	−15.083	−.264	−.028	4	18.35
3872	BD− 8° 2638 *m.*	F8	8.7		15 26.012	2.9302	−.0012	−.001	−9 12 24.20	15.096	.275	+.01	4	18.88
3873	BD−10° 2804	A2	6.53	7.0	15 42.076	2.9024	−.0006	−.0028	−10 58 36.89	15.111	.272	−.004	4	17.93
3874	BD+22° 2077	K0	*9.9*		15 43.952	3.4381	−.0163	−.001	+22 35 57.85	15.113	.322	.00	4	18.06
3875	Grmb 1534	Mb	5.98	6.18	15 51.584	4.4256	−.0705	−.0027	+57 2 21.20	15.120	.417	−.018	4	18.31
3876	BD− 1° 2242	A2	9.2		9 16 1.920	+3.0475	−.0040	−.0023	−1 38 42.99	−15.130	−.285	−.018	4	18.16
3877	BD+69° 517	K5	7.39	7.92	16 7.55	5.4407	−.1604	−.0096	+69 41 42.48	15.135	.513	−.089	4	18.58
3878	40 Lyncis	K5	3.30	3.39	16 11.125	3.6799	−.0266	−.0176	+34 43 53.96	15.139	.344	+.010	24 23	21.05 21.35
3879	BD+45° 1709		*8.68*	9.22	16 34.468	3.9543	−.0408	−.0024	+45 14 32.40	15.161	.371	−.158	4 5	19.15 18.36
3880	BD+81° 297		*8.90*	9.4	16 53.07	8.5432	−.6531	+.0076	+80 56 3.59	15.179	.807	−.442	5 4	18.71 19.08
3881	Wi (1) 9ʰ 269	F5	[illegible]	6.86	9 16 56.542	+3.2814	−.0108	−.0028	+13 27 11.95	−15.182	−.306	−.074	4	18.29
3882	BD−13° 2826	F8	8.0	8.37	16 57.963	2.8638	+.0002	−.0063	−13 28 7.49	15.184	.267	+.067	4	17.59
3883	BD+ 9° 2161		*9.49*	9.5	16 58.353	3.2178	−.0087	−.004	+9 26 38.20	15.184	.300	+.01	4	18.39
3884	BD+27° 1745	K2	8.8	8.70	17 2.152	3.5207	−.0197	+.0012	+27 11 13.22	15.188	.328	−.005	4	17.93
3885	BD+63° 838	K2	*8.50*	8.69	17 9.65	4.8221	−.1025	−.009	+63 30 56.21	15.195	.452	+.02	4	18.68
3886	CD−23° 8283	K0	8.0	8.13	9 17 15.340	+2.6892	+.0031	−.0020	−23 45 29.00	−15.199	−.249	−.010	4	18.89
3887	BD+33° 1850		*8.93*	9.2	17 21.475	3.6380	−.0249	−.001	+32 59 29.10	15.206	.340	−.01	4	18.15
3888	BD+47° 1666	G5	9.0	9.4	17 30.003	4.0199	−.0449	−.009	+47 25 45.87	15.214	.375	.00	4	18.16
3889	BD− 2° 2860	A0	9.0	9.3	17 41.716	3.0243	−.0033	+.0003	−3 11 22.46	15.225	.280	+.015	4	17.94
3890	BD+ 6° 2155	F8	7.9	[illegible]	17 55.642	3.1627	−.0071	−.005	+5 55 13.65	15.238	.293	−.03	4	17.85
3891	θ Pyxidis	Ma	4.93	4.7	9 17 57.022	+2.6563	+.0036	−.0015	−25 37 27.55	−15.240	−.245	−.009	4	18.32
3892	BD+55° 1331	K0	*7.67*	7.13	18 5.728	4.3365	−.0654	−.003	+55 32 5.21	15.248	.404	+.03	4	17.65
3893	BD+ 2° 2188	G5	*8.10*	8.45	18 20.923	3.1062	−.0055	−.0022	+2 12 47.30	15.262	.286	+.012	4	18.37
3894	BD+17° 2073		*9.33*	9.1	18 24.653	3.3480	−.0132	−.002	+17 37 59.65	15.266	.310	.00	4	18.53
3895	BD+66° 612	K0	*8.86*	8.82	18 27.83	5.0077	−.1201	−.0020	+65 53 37.09	[illegible]	.466	−.021	4	18.10
3896	BD− 4° 2602	K0	7.46	7.2	9 18 50.600	+3.0017	−.0027	−.0013	−4 41 49.72	−15.291	−.277	+.011	4	18.24
3897	BD+ 4° 2178 *br.*	F0	7.19	7.23	19 5.871	3.1307	−.0061	−.0054	+3 50 37.44	15.305	.288	+.013	4	18.11
3898	BD+51° 1507	K0	*8.50*	8.51	19 13.886	4.1475	−.0533	+.001	+51 15 26.16	15.312	.384	−.02	4	18.63
3899	BD+20° 2314	G0	7.77	8.00	19 16.523	3.3986	−.0153	−.0115	+20 42 24.31	15.315	.313	+.036	5	17.67
3900	Lal 18466	A5	6.45	[illegible]	19 26.214	3.7203	−.0292	−.0071	+36 55 52.36	15.324	.343	−.032	4	18.52

3846. 10^{m}1, 1″2, 231°.
3852. 11^{m}0, 2″3, 133°.

3861. 5^{m}5, 2″9, 244°.
3872. 9^{m}4-9^{m}4, 1″0, 146°.

3897. 8^{m}5, 21″, 311°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3901	BD− 7° 2798	K2	8.6	7.9	9 19 26.942	+ 2.9619	−0.0018	−0.002	− 7 19 43.20	−15.324	−0.272	+0.03	4	18.84
3902	BD−18° 2660	F5	8.6		19 35.605	2.7749	+ .0020	− .0070	−19 5 3.87	15.333	.255	− .044	5	18.29
3903	λ Pyxidis	K0	4.90	4.7	19 44.386	2.6058	+ .0043	− .0117	−28 29 28.98	15.341	.239	+ .022	4	19.20
3904	BD−15° 2778	K2	8.2	7.15	19 44.984	2.8348	+ .0009	− .0020	−15 27 30.64	15.341	.259	+ .009	4	18.66
3905	κ Leonis *br.*	K0	4.61	4.8	19 59.914	3.5015	− .0193	− .0023	+26 31 38.89	15.355	.323	− .053	4	18.92
3906	BD+44° 1861	K0	8.02	7.90	9 20 5.694	+ 3.9123	− .0395	− .001	+44 21 43.45	−15.361	− .360	− .02	4	18.17
3907	BD−21° 2783		10.1		20 6.105	2.7377	+ .0026	− .0020	−21 19 1.20	15.361	.250	+ .034	4	18.65
3908	BD+11° 2034		*9.62*		20 31.814	3.2495	− .0099	− .001	+11 39 34.50	15.385	.297	+ .02	4 5	18.25 17.64
3909	BD+62° 1070		*9 52*		20 38.17	4.6813	− .0934	− .002	+61 58 35.17	15.391	.430	− .01	4	18.52
3910	BD+48° 1770	K0	8.6	9.1	21 4.906	4.0223	− .0463	− .001	+48 1 38.31	15.416	.368	− .05	4	18.31
3911	Pi 9^{h} 74	K0	6.27	6.44	9 21 6.726	+ 3.3327	− .0127	− .0053	+16 55 52.99	−15.418	− .304	− .020	4	17.42
3912	BD+ 6° 2173	K0	7.52	7.0	21 9.061	3.1716	− .0074	+ .002	+ 6 36 14.54	15.420	.290	− .01	4	18.39
3913	BD− 8° 2669 *m.*	F8	9.1		21 18.866	2.9411	− .0013	− .001	− 8 46 5.45	15.429	.268	+ .02	4	17.99
3914	28 Hydræ	K5	5.81	5.92	21 24.071	3.0015	− .0027	− .0014	− 4 46 18.65	15.434	.272	− .010	4	19.57
3915	BD+73° 465	A3	*8.67*	8.9	21 33.63	5.8444	− .2155	− .0045	+72 54 46.75	15.443	.537	− .068	4	18.66
3916	BD+34° 1991		*9.50*		9 21 34.654	+ 3.6439	− .0259	− .003	+33 50 29.84	−15.444	− .332	− .02	4	17.92
3917	BD+ 1° 2299	A5	*8.25*	8.26	21 51.744	3.0868	− .0049	− .0033	+ 0 56 55.86	15.460	.280	+ .010	4	18.20
3918	Rad (90) 2419	B9	6.91	7.15	22 2.926	2.6766	+ .0036	− .0003	−24 59 28.32	15.470	.242	− .014	4	18.78
3919	BD−17° 2855	G5	7.07	6.99	22 12.698	2.8034	+ .0017	− .0027	−17 36 4.68	15.479	.253	+ .019	4	18.52
3920	BD+37° 1986		*9.73*	9.1	22 15.209	3.7266	− .0301	− .005	+37 36 24.45	15.481	.338	.00	4	18.52
3921	BD+42° 2011	F2	7.8	8.10	9 22 20.650	+ 3.8353	− .0358	+ .004	+41 56 50.08	−15.486	− .349	− .02	4	18.28
3922	CD−29° 7463	K0	8.9		22 52.314	2.5971	+ .0047	.0000	−29 20 35.68	15.516	.233	+ .012	4	19.20
3923	BD+54° 1306	K5	*8.83*	8.8	23 4.216	4.2425	− .0614	− .001	+54 9 3.12	15.527	.385	− .03	4	18.64
3924	BD+20° 2323	F0	*8.81*	9.5	23 26.663	3.3826	− .0149	− .002	+20 10 19.10	15.547	.304	+ .01	4	17.64
3925	BD+28° 1761	A0	8.9	9.2	23 28.737	3.5313	− .0211	+ .0024	+28 32 14.82	15.549	.318	+ .012	5	17.63
3926	BD+50° 1644	Ma	*7.40*	7.75	9 23 33.596	+ 4.0910	− .0515	− .003	+50 22 49.12	−15.554	− .370	− .02	4	18.94
3927	BD+22° 2094		*9.4*		23 34.553	3.4099	− .0160	+ .001	+21 48 11.23	15.555	.307	+ .02	4	18.70
3928	BD+32° 1886	G0	9.2	9.5	23 35.240	3.5941	− .0239	+ .0011	+31 44 10.26	15.555	.324	− .009	4	19.34
3929	α Hydræ	K2	2.16	2.48	23 39.388	2.9496	− .0013	− .0011	− 8 18 40.29	15.559	.264	+ .031	82 54	19.48 19.28
3930	BD−10° 2838	A2	8.7		24 3.532	2.9062	− .0003	.0000	−11 12 4.70	15.581	.260	− .005	4	18.42
3931	BD+85° 147	K5	*8.22*	8.0	9 24 8.28	+13.632	−2.306	− .008	+85 26 58.94	−15.586	−1.244	− .020	4	18.76
3932	CD−23° 8402	K0	7.9	7.68	24 21.152	2.7107	+ .0033	+ .0022	−23 19 47.47	15.597	.241	− .022	4	19.13
3933	BD− 0° 2201	A5	6.29	6.31	24 58.003	3.0595	− .0041	− .0054	− 0 54 25.90	15.631	.273	− .007	4	19.15
3934	BD+ 2° 2207		9.9		24 58.033	3.0979	− .0052	+ .0004	+ 1 43 32.56	15.631	.278	− .005	4	19.33
3935	Brad 1334	F5	4.78	5.2	25 5.312	3.0374	− .0035	+ .0084	− 2 25 7.22	15.638	.270	− .019	4	19.79
3936	BD+39° 2252	K0	8.5	8.57	9 25 6.826	+ 3.7562	− .0323	+ .002	+39 16 24.17	−15.639	− .338	− .05	4	18.61
3937	BD+ 8° 2231		9.2	8.7	25 11.666	3.1905	− .0081	− .003	+ 8 1 22.58	15.644	.284	− .02	4	18.36
3938	*h* Urs Maj	F0	3.75	3.91	25 14.34	4.7418	− .1024	+ .0170	+63 24 45.46	15.646	.426	+ .025	4 5	17.76 17.24
3939	BD+19° 2219		9.2	9.2	25 21.137	3.3675	− .0144	− .001	+19 27 0.89	15.652	.299	+ .02	4	19.08
3940	BD+10° 2007		*9.11*	9.2	25 32.072	3.2225	− .0092	− .002	+10 10 53.19	15.662	.286	− .07	4	19.61
3941	CD−25° 7237	F2	9.05	8.49	9 25 37.697	+ 2.6787	+ .0039	+ .0005	−25 18 1.03	−15.667	− .237	− .035	4	20.24
3942	BD+ 6° 2182	K2	*7.57*	7.44	25 44.940	3.1603	− .0071	− .0349	+ 6 0 13.11	15.673	.281	+ .114	4	18.92
3943	1 H Draconis	K2	4.58		25 47.95	8.7688	− .7587	− .0044	+81 40 54.61	15.677	.790	− .025	259 185	19.95 19.90
3944	Brad 1331	K0	5.98	5.92	25 53.408	3.6343	− .0262	− .0006	+34 0 29.37	15.681	.323	− .065	5	20.24
3945	ε Antliæ	K2	4.64		25 56.564	2.4769	+ .0060	− .0022	−35 36 3.04	15.684	.218	− .019	4	20.20
3946	CD−27° 6644	G5	9.4		9 25 59.875	+ 2.6405	+ .0044	− .0024	−27 27 2.69	−15.687	− .233	.000	6	21.55
3947	BD− 6° 2925		9.9		26 8.706	2.9713	− .0017	+ .001	− 6 57 21.29	15.695	.263	+ .02	4	19.19
3948	BD+29° 1908	G5	9.09	9.1	26 25.781	3.5450	− .0221	+ .0013	+29 38 26.83	15.711	.314	− .004	4	19.41
3949	BD+23° 2105	G0	9.5		26 36.166	3.4341	− .0173	− .002	+23 33 14.90	15.720	.303	− .07	4 5	20.13 19.10
3950	Wi (2) 9^{h} 477	A0	6.59	6.48	26 37.509	3.5087	− .0205	− .0035	+27 44 23.61	15.721	.310	− .018	4	19.72
3951	BD+12° 2049	K0	*8.67*	8.32	9 26 45.111	+ 3.2520	− .0102	− .002	+12 12 38.58	−15.728	− .287	.00	5	18.31
3952	BD−15° 2821 *m.*	G0	8.35	8.0	27 9.666	2.8452	+ .0012	− .0035	−15 23 13.29	15.751	.250	+ .020	4	19.40
3953	BD+48° 1779	K0	7.7	7.9	27 14.467	4.0127	− .0479	− .0054	+48 41 7.31	15.755	.355	− .024	4	19.59
3954	*d* Urs Maj	G0	4.57	4.70	27 26.17	5.3630	− .1677	− .0112	+70 10 59.30	15.765	.476	+ .070	12 11	20.77 21.24
3955	θ Urs Maj *br.*	F8	3.26	3.45	27 31.054	4.1303	− .0557	− .1025	+52 2 34.61	15.770	.365	− .547	4	19.46
3956	ξ Leonis	G5	5.12	4.88	9 27 38.123	+ 3.2428	− .0098	− .0065	+11 39 17.34	−15.776	− .283	− .087	52 44	19.04 19.16
3957	Brad 1339	K0	5.28	5.36	27 40.376	3.2191	− .0091	− .0005	+10 4 8.77	15.778	.283	− .023	4	18.13
3958	BD− 4° 2653	A2	8.2	7.69	27 51.412	3.0044	− .0025	− .0007	− 4 43 35.40	15.788	.263	− .007	4	18.88
3959	BD+32° 1894		9.2		27 57.117	3.5970	− .0248	+ .002	+32 30 3.33	15.793	.316	− .03	4	18.18
3960	BD+53° 1347	A3	7.53	7.71	28 18.776	4.1547	− .0578	− .0121	+52 47 57.00	15.813	.365	− .066	4	19.11

3905. 10^{m}1, 3″0, 206°. 3913. 9^{m}2–11^{m}5, 0″8, 101°. 3952. 8^{m}8–9^{m}6, 1″3, 220°. 3955. 14^{m}, 5″0, 78°.

No.	Name	Sp	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
3961	BD−16° 2815	F8	8.7	8.9	9 28 24.561	+2.8212	+0.0017	+0.0006	−17 2 10.80	−15.818	−0.246	−0.012	4	17.99
3962	Wi (1) 9^h 549	F5	6.15	6.28	28 33.336	3.1045	− .0054	− .0016	+ 2 13 9.11	15.826	.271	− .035	4	18.15
3963	BD+15° 2068		*9.27*	9.5	28 34.837	3.2888	− .0116	+ .001	+14 45 46.53	15.827	.288	− .04	4	19.01
3964	Wi (1) 9^h 572	K5	6.21	6.04	29 5.288	2.8815	+ .0005	− .0007	−13 9 44.33	15.854	.251	− .018	4	18.76
3965	BD+46° 1525	K0	*8.27*	8.25	29 5.307	3.9312	− .0434	+ .001	+46 23 37.97	15.854	.344	+ .03	4	18.84
3966	BD− 8° 2702	K5	9.2	9.3	9 29 12.513	+2.9439	− .0010	− .001	− 8 57 40.73	−15.861	− .256	− .04	4	18.89
3967	BD+ 4° 2207	F5	*9.02*	8.3	29 19.216	3.1322	− .0063	− .0075	+ 4 9 58.61	15.867	.272	− .029	4	18.49
3968	10 Leo Min.	G5	4.62	4.87	29 19.628	3.6826	− .0294	+ .0011	+36 45 12.72	15.867	.322	− .027	4	19.12
3969	Brad 1336	A0	4.65	5.02	29 21.138	4.1332	− .0568	− .0063	+52 24 28.94	15.868	.361	− .044	5	20.07
3970	BD+25° 2118	G5	9.2	9.35	29 21.942	3.4574	− .0185	+ .0014	+25 13 44.11	15.869	.301	− .007	4	19.16
3971	BD+44° 1880	G5	8.5	8.83	9 30 0.790	+3.8591	− .0395	+ .004	+44 1 46.03	−15.904	− .335	− .01	4	18.19
3972	BD+65° 723	G5	8.40	8.64	30 9.79	4.7943	− .1116	− .0062	+64 43 40.13	15.912	.418	+ .029	4	18.94
3973	BD+55° 1341	K0	*8.60*	8.71	30 15.602	4.2353	− .0645	− .008	+55 3 26.47	15.917	.369	− .03	4	18.48
3974	BD+17° 2105 *m.*	G	*8.81*	8.9	30 19.448	3.3179	− .0128	− .004	+16 48 11.88	15.920	.287	+ .01	4	18.01
3975	CD−29° 7579	A2	8.2	8.4	30 32.123	2.6160	+ .0052	− .0013	−29 22 56.22	15.931	.226	− .006	4 5	18.98 18.18
3976	A Hydræ	K0	5.70	5.49	9 30 33.121	+2.9938	− .0022	.0000	− 5 33 26.25	−15.932	− .258	− .057	4	19.75
3977	BD+78° 314	K	*8.90*	8.9	30 52.67	6.7987	− .3806	+ .0016	+77 44 35.53	15.950	.594	− .004	4	18.29
3978	BD−10° 2869	K0	9.9		30 58.656	2.9153	− .0002	+ .0008	−11 0 48.90	15.955	.251	− .035	4	18.52
3979	BD−20° 2948	G5	8.6	8.5	30 59.972	2.7664	+ .0029	+ .0063	−20 44 28.28	15.956	.237	− .157	4	18.32
3980	BD+35° 2027		*9.77*		31 13.335	3.6422	− .0277	+ .003	+35 10 47.19	15.968	.314	− .02	6	19.01
3981	BD− 2° 2928	A5	8.4	8.4	9 31 14.173	+3.0316	− .0031	− .0014	− 2 54 50.89	−15.969	− .260	+ .010	4	18.76
3982	BD+51° 1525	G0	*9.97*		31 16.746	4.0697	− .0533	+ .002	+50 59 9.06	15.971	.352	.00	4	17.82
3983	BD+15° 2079		9.2	9.2	31 50.055	3.2877	− .0118	+ .006	+14 57 20.25	16.000	.282	− .05	4	18.15
3984	Lal 18884	A0	6.25	6.33	31 50.514	2.7920	+ .0026	− .0018	−19 13 29.48	16.000	.239	− .046	4	18.13
3985	BD− 0° 2220	K0	8.9	8.96	31 50.517	3.0600	− .0040	− .0002	− 0 54 26.45	16.000	.262	− .003	5	17.87
3986	Cape (80) 5170	F5	6.48		9 31 52.162	+2.4993	+ .0065	− .0058	−35 27 57.78	−16.002	− .213	− .001	4	19.38
3987	BD+12° 2067	G5	7.9	8.24	32 2.974	3.2405	− .0100	− .002	+11 47 27.40	16.011	.278	− .01	4	18.06
3988	BD+38° 2054	F2	8.9	8.87	32 25.038	3.7057	− .0310	.000	+38 16 18.34	16.031	.318	− .02	4	18.37
3989	BD+49° 1856		*9.42*		32 40.792	4.0169	− .0502	− .002	+49 41 15.27	16.044	.344	− .04	4	18.18
3990	BD+18° 2231		*9.39*		32 43.028	3.3359	− .0137	− .004	+18 11 39.73	16.046	.284	− .02	4	17.86
3991	BD+41° 1979		*8.93*	9.20	9 32 47.283	+3.7723	− .0350	− .001	+41 9 4.28	−16.050	− .322	− .03	4	18.44
3992	Oelt 10040	K5	6.28	5.96	32 51.19	5.0175	− .1368	− .0057	+67 38 1.30	16.054	.431	− .027	12	18.60
3993	10 Leonis	K0	5.14	5.2	32 59.327	3.1737	− .0076	− .0044	+ 7 11 42.24	16.061	.270	− .007	4	19.06
3994	CD−24° 8272	K0	5.94	5.5	33 24.340	2.7018	+ .0043	− .0051	−24 56 17.32	16.082	.228	+ .030	4	18.69
3995	BD−14° 2904	A2	8.0	7.8	33 29.075	2.8666	+ .0011	+ .0005	−14 29 28.13	16.087	.243	− .025	4	18.46
3996	Lac 3939	K0	5.63		9 33 43.234	+2.5787	+ .0059	+ .0036	−31 49 6.91	−16.099	− .217	− .024	4	19.24
3997	BD−12° 2951	G5	8.6	8.3	33 48.406	2.8899	+ .0006	− .0010	−12 56 13.80	16.103	.244	− .011	4	18.46
3998	BD+59° 1251	F8	*8.57*	8.73	33 49.035	4.4090	− .0802	+ .001	+59 13 37.69	16.104	.376	− .02	5	17.48
3999	BD−22° 2668		9.2		33 58.718	2.7372	+ .0038	− .0059	−22 52 26.32	16.112	.231	+ .025	4	18.67
4000	BD+ 6° 2195		*9.90*		34 5.652	3.1563	− .0070	+ .001	+ 6 0 14.89	16.119	.267	+ .02	4	18.19
4001	Pi 9^h 129	K0	6.63	6.1	9 34 6.146	+3.8267	− .0387	− .0044	+43 30 24.10	−16.119	− .325	− .083	4	18.35
4002	BD+30° 1888		*8.81*	9.37	34 16.661	3.5427	− .0231	+ .0015	+30 38 12.00	16.128	.300	+ .002	4	17.94
4003	2 Sextantis	K0	'4.78	5.1	34 16.973	3.1423	− .0066	− .0110	+ 5 0 40.65	16.128	.265	− .063	4	19.08
4004	Wi (2) 9^h 656	B9	*6.80*	6.80	34 25.510	3.3717	− .0153	− .0017	+20 39 32.60	16.136	.285	− .019	4	18.37
4005	BD+58° 1207	G0	*9.75*		34 47.584	4.3493	− .0761	− .003	+58 12 39.48	16.155	.369	− .05	4	18.18
4006	89 B Urs Maj	K0	5.74	5.68	9 35 25.50	+5.1924	− .1595	− .0115	+69 36 9.66	−16.187	− .439	− .071	12	19.35
4007	BD+ 3° 2249	G5	*7.57*	7.72	35 30.093	3.1217	− .0059	− .0009	+ 3 33 27.70	16.191	.261	− .021	4	17.66
4008	BD− 3° 2740		9.8		35 36.526	3.0190	− .0027	+ .0022	− 3 54 20.72	16.197	.253	+ .015	4	18.34
4009	BD+10° 2041	G0	*8.82*	8.74	35 41.156	3.2097	− .0089	− .003	+ 9 52 26.10	16.201	.269	− .05	5	18.05
4010	BD+76° 362	K0	*8.65*	8.78	35 43.77	6.2906	− .3111	− .0022	+76 15 39.11	16.203	.533	+ .023	4	17.69
4011	BD+ 8° 2250		10.2		9 35 46.089	+3.1798	− .0079	− .004	+ 7 45 17.91	−16.205	− .267	− .03	4	18.45
4012	ι Hydræ	K0	4.10	4.0	35 46.278	3.0620	− .0040	+ .0031	− 0 46 44.45	16.205	.256	− .072	4	18.83
4013	Brad 1358	B9	6.19	6.74	35 53.012	2.9312	− .0003	− .0028	−10 12 28.63	16.211	.245	− .001	5	18.52
4014	BD+33° 1895	F2	7.82	8.40	35 59.532	3.5899	− .0258	− .003	+33 21 45.79	16.216	.301	+ .01	4	18.83
4015	BD+83° 263	F0	7.89	8.25	36 0.16	10.1840	−1.2384	− .0181	+83 41 49.32	16.217	.866	+ .002	4	18.19
4016	BD−18° 2752	F8	9.2		9 36 6.927	+2.8000	+ .0025	− .0025	−18 34 22.81	−16.223	− .234	+ .002	4	18.95
4017	BD+24° 2115	K0	9.2	8.2	36 7.968	3.4299	− .0180	+ .0001	+24 28 3.70	16.224	.287	− .045	4	18.86
4018	BD+ 2° 2233	K2	*9.44*		36 13.038	3.1005	− .0052	− .0016	+ 2 1 38.88	16.228	.258	− .001	4	18.36
4019	BD+28° 1795	K5	*9.27*	8.9	36 16.941	3.4927	− .0210	.0000	+28 10 16.81	16.231	.291	− .031	4	18.86
4020	BD+57° 1229	K2	*9.57*		36 24.100	4.2038	− .0725	+ .001	+57 18 43.17	16.237	.360	− .04	4	18.64

3971. 9^m1-10^m6, 0″9, 30°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4021	κ Hydræ	B3	4.96	5.70	9 36 28.263	+2.8779	+0.0010	−0.0018	−13 58 8.10	−16.241	−0.239	−0.016	4	19.04
4022	BD− 8° 2735	F2	8.8		36 34.169	2.9569	− .0010	− .001	− 8 25 5.63	16.246	.246	+ .01	4	18.49
4023	ο Leonis	*	3.76	3.63	36 52.950	3.2141	− .0091	− .0098	+10 15 24.88	16.262	.266	− .039	91 78	20.04 20.16
4024	CD−26° 7327	F2	8.3	8.2	36 53.662	2.6841	+ .0049	− .0040	−26 26 49.88	16.263	.222	− .020	4	19.15
4025	Brad 1354	K0	5.50	5.60	37 3.281	3.7305	− .0338	− .0051	+40 7 23.99	16.271	.311	− .049	5	19.50
4026	BD+ 5° 2220	K0	*8.54*	8.42	9 37 9.859	+3.1419	− .0066	+ .0012	+ 5 3 59.65	−16.276	− .260	− .024	4	18.82
4027	CD−28° 7525	K5	8.9		37 21.762	2.6500	+ .0054	− .0012	−28 28 59.96	16.287	.218	− .014	4	19.47
4028	BD+16° 2010	K0	7.9	7.83	37 22.739	3.2978	− .0125	− .002	+16 7 10.96	16.287	.274	− .02	4	18.70
4029	BD−16° 2857	K5	8.0	7.81	37 25.698	2.8343	+ .0021	− .0020	−17 1 11.32	16.290	.234	− .020	4	19.27
4030	Grmb 1573	A0	6.34	6.30	37 27.918	3.9619	− .0484	− .0033	+48 47 47.15	16.292	.329	− .025	4	18.90
4031	BD+71° 510	G	*9.02*	9.2	9 37 37.79	+5.3928	− .1870	− .0074	+71 28 0.51	−16.300	− .450	− .055	4	19.65
4032	BD+31° 2031		9.1		37 41.898	3.5519	− .0241	− .0005	+31 38 43.89	16.304	.294	− .027	4	18.63
4033	BD+26° 1993	K0	7.8	7.66	37 45.853	3.4510	− .0192	− .0026	+25 57 18.94	16.307	.286	− .005	4	18.97
4034	BD− 6° 2977	K2	8.7	8.5	37 50.784	2.9856	− .0017	− .001	− 6 23 47.26	16.311	.246	− .04	4	18.38
4035	BD+44° 1898		*9.53*	9.4	37 53.497	3.8279	− .0398	− .005	+44 12 3.47	16.314	.317	− .03	4	19.58
4036	13 Leo Min	F2	6.03	6.00	9 37 53.654	+3.6258	− .0279	− .0021	+35 27 35.13	−16.314	− .300	− .055	4	18.77
4037	BD+72° 469	G5	*8.45*	8.99	37 56.99	5.4340	− .1928	− .0056	+71 48 7.24	16.317	.454	− .025	4	19.55
4038	BD−20° 2993	K0	8.8		39 3.494	2.7826	+ .0034	− .0022	−20 37 6.77	16.373	.227	− .014	5	17.50
4039	BD+53° 1358	F5	*8.20*	8.5	39 13.912	4.1004	− .0591	+ .003	+53 9 36.06	16.381	.337	+ .05	4	18.13
4040	ψ Leonis	Ma	5.62	5.33	39 22.619	3.2701	− .0114	− .0002	+14 23 18.02	16.389	.267	− .014	4	17.71
4041	BD+12° 2082	K5	*7.95*	7.92	9 39 24.092	+3.2436	− .0104	− .003	+12 31 35.39	−16.390	− .268	+ .02	4	18.42
4042	BD+22° 2124	K0	*9.01*	8.7	39 24.372	3.3903	− .0165	− .002	+22 26 2.73	16.390	.277	.00	4	18.33
4043	BD+29° 1938		*9.27*	9.1	39 26.259	3.5094	− .0223	− .002	+29 35 5.59	16.392	.286	− .05	4	19.37
4044	BD+ 1° 2352	F0	8.39	8.36	39 31.597	3.0842	− .0047	− .0019	+ 0 51 12.90	16.396	.252	− .004	4	18.92
4045	BD+10° 2048		*9.95*		40 5.888	3.2082	− .0090	+ .003	+10 1 59.33	16.425	.261	− .01	5	18.31
4046	BD+62° 1085		*9.84*		9 40 12.75	+4.5275	− .0954	− .002	+62 14 53.93	−16.431	− .371	+ .01	4	18.58
4047	BD+78° 321	F	*9.40*		40 20.05	6.7336	− .4020	− .0075	+78 11 54.52	16.437	.555	− .015	5	17.13
4048	BD+74° 410	G0	*8.45*	8.28	40 28.77	5.7403	− .2393	− .0223	+74 0 50.03	16.444	.471	+ .040	4	17.66
4049	θ Antliæ	F5	4.98	5.1	40 38.124	2.6769	+ .0054	− .0045	−27 24 10.10	16.452	.216	+ .023	4	19.04
4050	BD− 0° 2242	G5	9.23		40 47.042	3.0673	− .0040	− .0035	− 0 24 35.60	16.459	.249	− .095	4	18.30
4051	Pi 9^h 167	G5	6.78	6.67	9 40 55.917	+2.7589	+ .0039	− .0045	−22 23 3.54	−16.467	− .223	+ .012	4	18.35
4052	BD−16° 2880	G0	9.7		41 18.614	2.8460	+ .0021	− .0040	−16 36 18.47	16.486	.229	− .070	4	18.32
4053	ε Leonis	G0	3.12	3.23	41 18.797	3.4134	− .0178	− .0030	+24 8 35.93	16.486	.275	− .024	90 72	20.43 20.60
4054	Wi (2) 9^h 800	K0	6.92	6.0	41 25.439	3.3351	− .0143	+ .0019	+19 3 10.03	16.491	.269	− .021	4	18.39
4055	CD−25° 7463	F8	9.9		41 32.254	2.7040	+ .0051	+ .0002	−25 54 24.05	16.497	.217	− .002	4	18.86
4056	BD+46° 1548	F8	*8.87*	9.10	9 41 37.753	+3.8573	− .0429	− .007	+45 57 46.82	−16.501	− .312	− .01	4	18.36
4057	BD− 3° 2765		9.3		41 42.267	3.0187	− .0026	+ .0030	− 4 4 12.56	16.505	.242	− .111	4	18.64
4058	Âbo (30) 205	Ma	5.99	5.9	41 56.905	3.1667	− .0075	+ .0007	+ 7 4 42.45	16.517	.255	− .039	4	18.38
4059	BD+66° 635	G5	*8.90*	9.4	41 58.91	4.7625	− .1203	− .0132	+65 52 3.67	16.519	.386	− .053	4	18.54
4060	BD− 1° 2300	K0	7.98	7.79	42 0.788	3.0433	− .0032	− .0008	− 2 13 22.16	16.520	.244	+ .028	4	18.91
4061	BD+34° 2029		8.7	8.6	9 42 9.568	+3.5858	− .0268	− .003	+34 9 25.51	−16.528	− .288	.00	4	18.85
4062	BD+51° 1543 *s. pr.*	G5	9.4	9.4	42 16.923	4.0169	− .0543	− .004	+51 19 31.49	16.534	.324	− .08	6 5	18.40 19.04
4063	BD+51° 1543 *m.*	G5	*8.42*		42 17.056	4.0167	− .0543	− .004	+51 19 32.11	16.534	.324	− .03	4	19.22
4064	BD−13° 2946	K2	8.0	7.82	42 24.169	2.8814	+ .0014	− .0030	−14 13 13.21	16.540	.230	+ .002	4	18.47
4065	BD+37° 2019	G5	*8.75*	9.4	42 49.107	3.6542	− .0307	− .010	+37 40 38.01	16.560	.293	− .13	5	19.16
4066	BD+ 4° 2245	K0	*8.61*	8.62	9 42 57.204	+3.1225	− .0057	− .0015	+ 3 47 11.44	−16.567	− .250	− .019	4	18.20
4067	BD+60° 1209	K0	7.24	7.04	43 1.61	4.4002	− .0860	− .012	+60 28 9.78	16.570	.354	− .04	4	18.36
4068	BD+27° 1811	F8	*9.52*		43 21.260	3.4631	− .0205	− .0014	+27 29 4.06	16.587	.277	− .042	4	18.35
4069	15 Leo Min	G0	5.20	5.60	43 26.181	3.8601	− .0437	+ .0212	+46 23 40.45	16.591	.309	− .099	4	18.43
4070	BD+75° 395 *br.*	G	9.28		43 35.09	5.8628	− .2646	− .0186	+74 58 3.66	16.598	.472	− .058	4	18.48
4071	BD+42° 2047		9.0		9 43 35.380	+3.7615	− .0374	− .001	+42 35 32.78	−16.598	− .300	+ .01	4	18.89
4072	CD−24° 8459	A0	9.4		43 48.710	2.7236	+ .0049	− .0008	−25 0 46.96	16.609	.215	− .024	5 4	18.24 18.82
4073	BD−11° 2722	K2	8.4	8.56	43 55.053	2.9109	+ .0007	− .0010	−12 12 31.74	16.614	.230	.000	5	18.13
4074	BD+49° 1882		*10.01*		44 28.041	3.9489	− .0503	− .002	+49 37 35.57	16.641	.314	.00	4	18.55
4075	BD+11° 2107	F5	9.13	9.3	44 33.396	3.2165	− .0094	− .003	+10 55 51.23	16.645	.254	+ .03	4	18.19
4076	BD+ 8° 2268	F5	7.9	7.42	9 44 37.942	+3.1862	− .0082	+ .001	+ 8 40 26.47	−16.649	− .252	− .01	4	18.09
4077	BD+18° 2274	K0	7.78	7.76	44 40.442	3.3206	− .0138	− .002	+18 25 49.10	16.651	.262	− .01	4	18.51
4078	BD+35° 2062		*9.88*		44 45.968	3.5920	− .0275	− .005	+34 55 44.83	16.656	.284	− .01	4	18.53
4079	BD+82° 286		*9.40*		45 14.55	8.4377	− .8140	− .0267	+82 7 59.78	16.679	.675	− .021	5	17.92
4080	υ Urs Maj.	F0	3.89	3.71	45 18.911	4.3263	− .0810	− .0379	+59 24 57.36	16.682	.343	− .158	4	18.39

4023. F5, A3.

4062. 9^{m}5, 2$''$3, 71°.

4063. 9^{m}1–9^{m}2, 2$''$3, 71°.

4070. 11^{m}0, 5$''$1, 0°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4081	BD+21° 2113	F0	6.01	6.11	9 45 21.616	+3.3653	−0.0160	−0.003	+21 33 10.42	−16.684	−0.266	−0.01	4	18.50
4082	BD+25° 2163	F5	6.96	6.78	45 37.884	3.4165	− .0184	− .0025	+24 56 4.50	16.698	.269	+ .033	4	17.93
4083	BD−17° 2975	A5	8.8		45 42.400	2.8334	+ .0028	− .0026	−17 56 45.44	16.701	.222	− .004	4	18.15
4084	BD+32° 1940		*9.71*		46 3.413	3.5335	− .0246	.000	+32 0 18.34	16.718	.277	− .01	5 4	17.52 17.83
4085	CD−28° 7662	A0	8.7	8.31	46 14.227	2.6702	+ .0061	− .0002	−28 39 35.28	16.727	.207	− .010	4	18.71
4086	BD− 9° 2939	K5	8.6	8.58	9 46 15.219	+2.9471	− .0001	− .002	− 9 40 46.49	−16.728	− .229	+ .06	4	17.96
4087	BD+40° 2264	F5	8.6	9.3	46 23.595	3.7026	− .0345	+ .001	+40 34 20.52	16.734	.290	+ .03	4	18.14
4088	BD+ 1° 2370	A2	8.5	9.2	46 50.679	3.0878	− .0046	− .0006	+ 1 10 51.90	16.756	.240	− .008	4	17.67
4089	BD− 7° 2905	A0	9.7		46 55.718	2.9704	− .0008	− .001	− 7 56 27.73	16.761	.231	.00	4	18.26
4090	BD−20° 3032	A0	7.83	8.39	47 0.519	2.8003	+ .0037	− .0035	−20 23 42.88	16.764	.216	− .010	4	18.16
4091	BD+68° 581		*9.12*	8.9	9 47 9.75	+4.9348	− .1455	+ .0126	+68 32 40.36	−16.771	− .387	− .003	4	17.81
4092	6 Sextantis	A2	6.00	6.37	47 12.171	3.0232	− .0024	+ .0009	− 3 52 4.12	16.773	.234	− .030	4	18.45
4093	BD+13° 2166		9.0	8.93	47 14.423	3.2420	− .0106	− .004	+13 1 44.77	16.775	.251	− .01	4	17.90
4094	BD− 1° 2314	K2	7.38	7.26	47 14.906	3.0538	− .0034	+ .0053	− 1 28 51.86	16.775	.237	− .107	4	18.50
4095	Brad 1382	A2	5.33	5.91	47 20.716	3.4101	− .0183	+ .0011	+24 46 28.74	16.780	.266	− .193	4	18.27
4096	BD+ 3° 2274	F0	*9.52*	9.5	9 47 24.248	+3.1178	− .0057	− .0030	+ 3 31 46.18	−16.783	− .242	+ .004	4	18.45
4097	BD+36° 2004	F5	7.72	7.58	47 28.318	3.6167	− .0295	− .004	+36 40 42.26	16.786	.281	− .12	4	18.35
4098	υ Hydræ	K0	4.29	4.5	47 37.760	2.8844	+ .0017	+ .0009	−14 28 15.03	16.794	.223	− .027	4	18.34
4099	BD+70° 586		*9.07*		47 49.31	5.0564	− .1610	− .0284	+69 49 45.55	16.803	.395	− .102	4	18.45
4100	BD+56° 1412	K0	*7.92*	8.20	48 8.956	4.1566	− .0681	.000	+56 8 47.51	16.818	.323	− .04	4	18.02
4101	μ Leonis	K0	4.10	3.81	9 48 13.060	+3.4332	− .0196	− .0163	+26 23 3.71	−16 822	− .264	− .063	5	17.99
4102	BD+47° 1717		*9.55*		48 24.808	3.8495	− .0448	+ .002	+46 56 34.30	16.831	.298	.00	4	17.91
4103	Grmb 1585	K0	6.42	6.09	49 14.00	4.4017	− .0909	− .0002	+61 29 38.69	16.870	.339	− .004	4	17.98
4104	BD+20° 2393	G5	*9.20*	8.61	49 26.959	3.3346	− .0149	.000	+19 58 19.13	16.880	.255	+ .02	4	18.19
4105	BD+39° 2287		*9.07*	8.7	49 29.556	3.6623	− .0328	− .006	+39 17 28.36	16.882	.280	− .05	4	18.17
4106	BD−22° 2751	K0	9.0		9 49 41.889	+2.7763	+ .0045	.0000	−22 23 36.74	−16.891	− .212	− .010	4	18.35
4107	BD+42° 2061	K0	*8.67*	8.35	49 44.589	3.7328	− .0373	+ .002	+42 32 38.21	16.894	.286	− .08	4	18.31
4108	CD−23° 8831	K5	8.1	8.3	49 50.657	2.7567	+ .0049	+ .0009	−23 43 52.10	16.899	.209	− .010	4	18.38
4109	BD+31° 2067		8.7	8.5	50 4.640	3.5105	− .0240	− .0008	+31 22 58.55	16.910	.267	− .014	4	18.14
4110	BD+28° 1818	K0	*8.84*	8.90	50 8.436	3.4498	− .0207	+ .0017	+27 43 51.47	16.913	.263	+ .009	5	17.96
4111	BD+16° 2050		*9.21*	9.3	9 50 35.053	+3.2768	− .0122	− .002	+15 55 29.21	−16.933	− .249	+ .02	4	17.88
4112	BD+37° 2027	G5	*8.87*	9.1	50 57.288	3.6215	− .0306	− .005	+37 34 29.99	16.951	.275	− .03	4	17.66
4113	BD− 5° 2935		9.5		51 0.060	3.0033	− .0016	.000	− 5 32 31.66	16.953	.225	+ .01	4 5	16.81 17.69
4114	BD+54° 1338	F8	8.87	8.9	51 4.917	4.0694	− .0626	− .003	+54 26 0.05	16.957	.309	+ .02	4	18.00
4115	183 G Hydræ	Ma	5.16	5.29	51 5.785	2.8325	+ .0033	− .0016	−18 37 47.12	16.957	.212	− .045	3 4	18.92 18.19
4116	BD−11° 2758	F0	7.68	7.71	9 51 8.333	+2.9201	+ .0009	+ .0013	−12 5 22.15	−16.959	− .219	+ .020	4	18.08
4117	BD+19° 2283	F0	*8.15*	7.90	51 8.986	3.3208	− .0143	− .0001	+19 12 5.34	16.960	.251	− .033	4	18.25
4118	109 B Urs Maj	K0	5.96	5.79	51 15.92	5.4393	− .2185	− .0148	+73 15 39.33	16.965	.415	− .047	8	18.10
4119	BD+67° 625	K2	*8.52*	8.24	51 25.77	4.7599	− .1305	− .0005	+67 9 0.24	16.973	.362	− .019	4	17.96
4120	BD+62° 1091		*9.82*		51 34.89	4.3917	− .0918	− .007	+61 42 7.73	16.980	.333	.00	4	18.99
4121	Brad 1391	F2	6.60	6.50	9 51 50.103	+3.5290	− .0253	− .0031	+32 45 50.84	−16.992	− .266	− .001	4	18.37
4122	WI (1) 9ʰ 1052	K0	7.03	7.30	52 9.502	2.9825	− .0009	− .0020	− 7 15 55.38	17.007	.223	+ .008	4	18.19
4123	83 B Leonis	K0	5.93	6.12	52 11.619	3.1887	− .0085	− .0061	+ 9 18 46.13	17.008	.239	+ .007	4	19.31
4124	CD−26° 7539	A2	8.3	8.1	52 29.770	2.7202	+ .0059	− .0030	−26 32 7.50	17.022	.202	− .009	4	18.63
4125	BD+ 0° 2588	K5	*8.03*	8.20	52 33.526	3.0717	− .0040	− .0004	− 0 4 51.89	17.025	.230	− .009	5	19.43
4126	19 Leo Min	F5	5.19	5.10	9 52 47.449	+3.6944	− .0358	− .0102	+41 26 14.01	−17.036	− .276	− .037	4	18.58
4127	BD+26° 2029	F8	*9.9*		53 11.141	3.4160	− .0193	− .0007	+26 3 8.80	17.054	.255	.000	4	18.37
4128	BD−16° 2926	F2	8.6	8.5	53 23.586	2.8667	+ .0026	+ .0004	−16 22 11.28	17.064	.213	− .011	4	17.99
4129	BD+ 2° 2272	K0	8.5	9.1	53 30.328	3.0974	− .0049	− .0021	+ 2 1 13.80	17.069	.229	− .001	4	18.83
4130	CD−28° 7775	K2	9.5		53 42.338	2.6903	+ .0068	− .0021	−28 39 29.22	17.078	.197	.000	5	20.64
4131	BD− 9° 2968	K2	9.1	9.1	9 53 42.817	+2.9573	.0000	.000	− 9 21 50.13	−17.078	− .219	+ .03	5 4	18.34 18.91
4132	BD+ 9° 2269	K0	6.27	6.09	53 53.420	3.1796	− .0081	+ .001	+ 8 41 47.30	17.086	.236	− .02	4	18.66
4133	BD+71° 522	F5	*9.07*	9.1	53 54.21	5.1166	− .1783	− .0103	+71 7 37.41	17.087	.383	− .024	4	19.18
4134	BD−22° 2775	G5	9.7		53 54.256	2.7829	+ .0048	+ .0034	−22 31 49.22	17.087	.205	− .088	4	18.75
4135	ν Leonis	A0	5.18	5.7	53 55.291	3.2318	− .0104	− .0021	+12 49 37.02	17.088	.239	− .020	4	18.85
4136	BD+17° 2160		*9.45*		9 54 13.068	+3.2868	− .0129	− .003	+17 4 26.59	−17.102	− .242	+ .01	4	19.41
4137	Grmb 1594	K5	5.71	5.46	54 22.058	4.1531	− .0718	− .0039	+57 11 43.26	17.108	.300	− .043	4	19.47
4138	BD+38° 2090	F5	*9.31*		54 29.799	3.6194	− .0314	− .003	+38 9 19.70	17.114	.268	+ .01	4	18.83
4139	BD+48° 1825	F5	*8.58*	7.87	54 33.378	3.8540	− .0474	− .004	+48 19 32.43	17.117	.286	− .03	4	18.92
4140	BD+24° 2164	K0	*8.11*	7.98	54 54.034	3.3769	− .0175	− .003	+23 40 23.38	17.132	.248	− .03	5	17.65

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4141	Wi (2) 9ʰ 1095	A2	6.61	6.60	9 55 1.004	+3.3486	−0.0160	−0.0031	+21 42 14.27	−17.138	−0.246	+0.023	4	19.04
4142	η Antliæ	F0	5.25		55 26.192	2.5796	+ .0088	− .0076	−35 30 28.30	17.157	.186	− .027	4	18.73
4143	BD−19° 2883	F8	8.0	7.75	55 32.339	2.8242	+ .0039	− .0058	−19 47 23.57	17.161	.205	− .011	4	17.95
4144	12 Sextantis	A5	6.63	6.5	55 34.159	3.1182	− .0056	− .0050	+ 3 46 3.64	17.163	.228	+ .011	4	19.18
4145	BD+ 6° 2239	K0	8.3	8.07	55 39.096	3.1452	− .0067	− .003	+ 5 59 37.02	17.166	.230	− .02	4	19.14
4146	BD+10° 2087		*9.68*		9 55 49.763	+3.1945	− .0088	.000	+10 1 25.36	−17.174	− .233	− .02	4	18.67
4147	π Leonis	Ma	4.89	4.60	55 59.239	3.1747	− .0080	− .0023	+ 8 25 43.06	17.181	.231	− .027	95 83	19.87 20.04
4148	Carr 1451	K0	6.48	6.40	55 59.19	9.9765	−1.4169	+ .0035	+84 18 22.33	17.181	.742	+ .001	8	18.24
4149	BD+47° 1732	G5	8.9	8.97	56 17.722	3.8169	− .0454	+ .001	+47 17 43.04	17.195	.279	− .05	4	18.33
4150	20 Leo Min.	G5	5.60	5.58	56 24.210	3.5068	− .0248	− .0409	+32 19 4.70	17.200	.255	− .440	4	19.43
4151	BD+29° 1986	K2	6.99	7.28	9 56 42.610	+3.4549	− .0219	+ .0024	+29 10 8.15	−17.214	− .250	+ .003	4	18.87
4152	BD−11° 2775		9.2	8.5	56 43.810	2.9302	+ .0010	− .001	−11 45 37.96	17.215	.211	+ .02	4	19.60
4153	BD− 3° 2831	A5	8.7	9.4	56 53.360	3.0263	− .0021	+ .0007	− 3 52 49.25	17.222	.219	+ .011	4	18.53
4154	BD+43° 1986 *br.*	A2	9.2	9.3	56 57.152	3.7143	− .0383	+ .001	+43 11 10.00	17.225	.270	− .03	4	18.36
4155	BD+64° 766		*9.02*	8.9	57 2.03	4.4692	− .1046	− .0035	+63 56 3.48	17.229	.326	+ .052	4	19.46
4156	BD−15° 2958		9.5	8.8	9 57 2.530	+2.8828	+ .0025	− .0025	−15 32 5.34	−17.229	− .207	− .017	4	18.90
4157	BD+77° 392		*9.25*		57 5.99	5.9799	− .3212	− .0202	+76 46 59.82	17.231	.438	− .063	4	18.78
4158	BD+58° 1230	K0	*8.42*	8.55	57 24.470	4.1738	− .0756	− .004	+58 15 17.05	17.245	.303	.00	4	18.35
4159	BD+33° 1934		*8.76*	8.85	57 24.694	3.5223	− .0259	.000	+33 25 21.49	17.245	.254	− .04	4	18.36
4160	BD−13° 3010		9.0	9.1	57 31.383	2.9084	+ .0018	+ .0018	−13 34 6.13	17.250	.208	+ .020	4	17.98
4161	BD+ 4° 2278	F8	*9.19*	9.1	9 57 54.612	+3.1234	− .0058	+ .0010	+ 4 16 4.40	−17.268	− .224	− .010	4	18.02
4162	BD+15° 2157	A3	8.29	8.59	58 16.126	3.2506	− .0114	− .004	+14 43 34.21	17.283	.233	− .03	4	17.85
4163	BD+73° 482	F5	*9.08*		58 33.59	5.3085	− .2141	+ .0025	+73 11 25.92	17.296	.382	+ .020	4	18.88
4164	Wi (1) 9ʰ 1192	K0	7.02	6.69	58 44.090	3.0647	− .0036	+ .0004	− 0 40 46.10	17.303	.222	− .094	4	18.53
4165	BD− 5° 2977 *br.*	K5	9.0	8.90	58 51.035	3.0073	− .0013	+ .002	− 5 32 27.42	17.309	.214	− .04	4	18.49
4166	BD+34° 2073		*8.82*	8.8	9 58 53.079	+3.5343	− .0269	− .001	+34 24 44.05	−17.311	− .252	− .03	4	18.32
4167	CD−25° 7707	A3	9.2	8.5	59 2.468	2.7427	+ .0062	− .0007	−26 7 15.06	17.318	.194	− .004	4	18.70
4168	BD+75° 400	G5	8.42	8.80	59 3.24	5.5324	− .2501	+ .0008	+74 41 56.36	17.318	.399	− .009	4	18.46
4169	BD−17° 3039	F8	9.9		59 7.136	2.8605	+ .0034	+ .0040	−17 30 38.60	17.321	.203	− .075	4	18.02
4170	BD+36° 2024		*9.61*		59 17.337	3.5680	− .0292	− .0041	+36 24 12.38	17.328	.254	+ .032	5 4	19.00 18.53
4171	BD+50° 1712	K0	*9.75*		9 59 41.547	+3.8889	− .0523	− .002	+50 37 48.13	−17.346	− .275	.00	3	17.81
4172	BD+12° 2138	A0	7.04	6.89	59 51.469	3.2151	− .0098	.000	+12 0 58.06	17.353	.227	+ .05	5	18.18
4173	BD+41° 2049		9.1		59 55.969	3.6584	− .0353	− .0088	+41 13 22.23	17.357	.260	− .038	4	18.26
4174	BD− 6° 3066	K2	9.1	9.4	9 59 57.405	2.9874	− .0006	.000	− 7 16 26.97	17.358	.212	+ .03	4	17.96
4175	BD+52° 1450	A2	*7.72*	7.86	10 0 23.916	3.9186	− .0552	+ .0001	+51 46 47.04	17.377	.278	− .001	4	18.74
4176	BD−21° 2976	K5	7.8	7.25	10 0 34.646	+2.8016	+ .0050	+ .0017	−22 10 15.60	−17.385	− .196	+ .028	4	18.77
4177	Lac 4126	F0	5.80	5.91	0 39.203	2.7781	+ .0057	− .0102	−23 53 52.15	17.388	.194	+ .022	4	18.77
4178	BD+20° 2430	G5	8.35	8.31	0 47.170	3.3122	− .0147	− .002	+19 49 39.29	17.394	.233	+ .01	4	18.64
4179	BD+46° 1581	K0	8.6	8.9	0 53.397	3.7607	− .0430	+ .001	+46 1 54.45	17.398	.265	− .01	4	18.98
4180	BD+25° 2199	G0	*9.3*	9.18	0 53.557	3.3837	− .0185	+ .0007	+25 6 29.87	17.398	.237	− .074	5	18.90
4181	BD+17° 2169		*9.15*	9.2	10 0 56.040	+3.2737	− .0127	− .004	+16 51 17.38	−17.400	− .230	− .04	4	19.23
4182	BD+67° 634	K5	*7.99*	7.7	0 59.13	4.6130	− .1250	− .0015	+66 42 17.35	17.403	.326	− .020	4	19.20
4183	BD+68° 590	F8	*8.64*	8.24	0 59.19	4.6926	− .1345	+ .0032	+67 44 7.90	17.403	.332	− .014	5	17.74
4184	Lac 4132 *m.*	B9	6.87	6.99	1 11.029	2.7236	+ .0070	− .0025	−27 48 1.07	17.411	.189	+ .001	4	19.46
4185	υ^2 Hydræ	B8	4.72	4.5	1 13.728	2.9238	+ .0017	− .0025	−12 40 34.15	17.413	.203	+ .012	4	18.35
4186	BD+13° 2203		*9.12*	8.8	10 1 20.957	+3.2296	− .0106	− .002	+13 21 3.69	−17.419	− .226	− .01	4	18.93
4187	BD− 8° 2843	A2	8.3	7.90	1 31.363	2.9662	+ .0003	− .001	− 9 9 31.70	17.426	.207	.00	4	18.60
4188	BD+20° 2431	A7	*9.47*		1 38.154	3.3108	− .0147	− .002	+19 50 35.24	17.431	.231	− .03	4	18.87
4189	BD+22° 2179	K0	7.04	7.10	1 44.304	3.3378	− .0161	− .002	+21 54 12.23	17.435	.233	+ .04	4	18.19
4190	BD+59° 1286 *br.*	K0	*9.50*		1 45.572	4.1927	− .0805	− .010	+59 31 1.45	17.436	.295	− .02	4	18.86
4191	Rad (45) 2443	F2	7.49	7.23	10 2 10.141	+3.7403	− .0419	− .0039	+45 27 0.81	−17.454	− .261	− .020	4	18.93
4192	BD+ 2° 2288	F8	*8.84*	8.9	2 16.437	3.1004	− .0048	− .0041	+ 2 25 8.01	17.458	.214	− .015	4	17.88
4193	BD+53° 1387	A0	*7.92*	7.76	2 29.258	3.9615	− .0598	− .005	+53 35 14.07	17.467	.276	− .02	5	18.25
4194	BD+30° 1962		*9.20*	8.80	2 35.757	3.4486	− .0225	− .0080	+29 50 59.95	17.472	.239	− .150	4	19.52
4195	Brad 1404	G5	6.29	6.1	2 36.476	3.1416	− .0065	− .0023	+ 6 0 7.08	17.472	.217	− .015	4	19.27
4196	BD− 1° 2346	F2	8.5	8.03	10 2 40.986	+3.0498	− .0027	− .0012	− 2 0 15.03	−17.476	− .210	− .021	4	19.90
4197	BD+24° 2180	K0	9.0	9.1	2 41.403	3.3641	− .0176	− .0032	+23 59 45.93	17.476	.232	+ .003	4	18.38
4198	BD+43° 1990	G5	*8.82*	8.33	2 50.212	3.6912	− .0385	− .004	+43 24 36.89	17.482	.255	− .03	4	19.24
4199	η Leonis	A0	3.58	3.98	2 58.440	3.2743	− .0128	− .0001	+17 9 12.00	17.488	.226	− .012	4	18.41
4200	BD+ 4° 2292		*8.94*	8.63	3 0.825	3.1193	− .0056	− .0011	+ 4 4 50.15	17.490	.215	− .020	4	19.26

4154. $10^{m}5$, $5''0$, 172°. 4165. $12^{m}9$, $1''4$, 344° 4184. $7^{m}2$-$8^{m}5$, $0''4$, 325°. 4190. $10^{m}6$, $5''5$, 218°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4201	BD+69° 560		*9.48*		10 3 8.78	+ 4.7620	−0.1461	−0.0083	+68 53 21.70	−17.496	−0.332	+0.006	4	19.75
4202	BD+48° 1837		*9.43*		3 10.826	3.8002	− .0468	− .001	+48 7 48.43	17.497	.263	− .05	4	19.76
4203	BD−10° 2994	K0	8.8	8.9	3 11.480	2.9469	+ .0011	− .0067	−10 55 27.18	17.497	.202	+ .048	4	19.58
4204	BD−19° 2915	G5	9.1		3 12.658	2.8430	+ .0042	− .0007	−19 24 48.57	17.498	.195	+ .031	4	19.86
4205	BD+27° 1850	K5	9.3	9.28	3 19.665	3.4054	− .0201	+ .0020	+27 3 33.60	17.503	.235	− .013	4	19.21
4206	BD+ 1° 2403	Ma	[illegible]	7.18	10 3 26.518	+ 3.0876	− .0043	− .0010	+ 1 18 34.47	−17.508	− .212	− .015	4	19.70
4207	BD+39° 2316		*9.46*		3 30.624	3.6023	− .0325	.000	+39 9 22.23	17.511	.248	− .04	4	20.24
4208	BD+34° 2089	K0	7.62	7.48	4 2.745	3.5201	− .0271	− .0064	+34 38 7.49	17.533	.242	− .070	4	19.08
4209	CD−29° 8108		11.0	ft.	4 6.403	2.7040	+ .0078	+ .0019	−29 39 50.39	17.536	.183	.000	4	19.74
4210	α Leonis	B8	1.34	1.69	4 6.804	3.2145	− .0100	− .0169	+12 21 31.56	17.537	.219	− .003	93 60	19.79 19.47
4211	BD+56° 1434	K5	*8.00*	[illegible]	10 4 18.978	+ 4.0194	− .0660	− .002	+55 40 51.72	−17.545	− .276	− .02	4	19.25
4212	BD+63° 886	K0	7.12	7.23	4 37.40	4.3552	− .0996	− .006	+63 18 44.41	17.558	.299	− .18	4	18.87
4213	BD+22° 2185	A0	8.0	8.43	4 44.306	3.3353	− .0163	− .004	+22 10 59.01	17.563	.226	.00	4	18.47
4214	Brad 1408	G5	,7.11	7.2	4 45.058	3.2935	− .0140	+ .0037	+18 55 27.86	17.564	.224	− .068	4	19.33
4215	BD+32° 1986	G0	*9.57*		4 55.171	3.4743	− .0244	− .001	+31 58 49.07	17.571	.236	− .03	4	18.15
4216	BD−21° 2997	K2	8.5	8.34	10 5 2.120	+ 2.8214	+ .0050	− .0037	−21 21 48.78	−17.576	− .190	− .014	5	20.33
4217	BD+50° 1721	F2	7.22	7.24	5 12.382	3.8348	− .0505	− .0099	+49 54 4.76	17.583	.261	− .033	5	18.53
4218	BD− 3° 2860	K5	8.3	7.99	5 26.210	3.0329	− .0020	− .0010	− 3 33 17.38	17.592	.205	− .011	4	18.43
4219	BD+65° 756	K0	*7.87*	7.9	5 30.14	4.4417	− .1102	− .0014	+64 56 14.73	17.595	.303	− .019	4	19.66
4220	BD+15° 2169		*9.36*	8.5	5 36.855	3.2491	− .0117	+ .002	+15 24 59.10	17.600	.219	+ .04	4	18.97
4221	Pi 9ʰ 254	K0	6.51	6.40	10 6 9.940	+ 3.6273	− .0348	− .0011	+41 3 19.18	−17.623	− .245	− .012	4	18.29
4222	Cape (50) 1834	F0	5.42	5.70	6 11.883	2.9325	+ .0018	− .0089	−12 25 11.93	17.624	.197	− .127	4	19.72
4223	BD− 4° 2809	F5	8.1	7.6	6 23.200	3.0162	− .0013	− .0067	− 5 4 34.93	17.632	.202	− .019	4 3	18.86 19.83
4224	Grmb 1619	K0	6.14	5.80	6 28.585	3.5654	− .0308	− .0030	+37 47 47.58	17.636	.240	− .036	4	18.86
4225	λ Hydræ	K0	3.83	3.80	6 41.251	2.9384	+ .0017	− .0137	−11 57 29.51	17.644	.195	− .093	84 77	19.92 19.72
4226	BD+54° 1353	F8	*9.67*		10 6 47.961	+ 3.9408	− .0604	+ .003	+53 52 39.44	−17.649	− .265	− .03	4	18.92
4227	BD+10° 2119		*9.60*		7 1.472	3.1888	− .0088	.000	+10 24 21.49	17.659	.212	+ .02	4	18.76
4228	BD+54° 1354	K5	8.88	8.9	7 4.636	3.9625	− .0624	− .001	+54 36 29.18	17.661	.266	− .03	4	18.62
4229	BD−16° 2989	G5	7.7	7.79	7 27.346	2.8771	+ .0033	− .0029	−17 14 26.56	17.676	.191	− .002	4	18.94
4230	BD+26° 2056	F2	*10.02*		7 40.037	3.3814	− .0192	.000	+26 8 9.62	17.685	.225	.00	5	18.70
4231	CD−26° 7733		10.5	ft.	10 7 41.953	+ 2.7613	+ .0070	− .0097	−26 20 36.55	−17.686	− .182	− .021	4	18.90
4232	BD+81° 330		*9.52*		7 42.15	7.0071	− .5924	− .0030	+80 55 5.10	17.687	.474	+ .019	4	18.76
4233	BD+37° 2061	K0	*8.43*	8.67	7 50.066	3.5473	− .0298	− .001	+37 4 12.91	17.692	.235	− .02	4	18.21
4234	Fedor 1629	A0	6.72	6.87	7 58.15	6.4078	− .4492	− .0015	+79 20 37.49	17.698	.431	− .007	8	18.84
4235	Wi (2) 10ʰ 77	G5	6.96	6.4	8 10.208	3.4148	− .0212	− .0028	+28 38 15.60	17.706	.227	− .010	4 5	17.99 17.25
4236	BD− 7° 2979	F0	8.5	8.43	10 8 13.742	+ 2.9910	− .0002	.000	− 7 25 48.66	−17.708	− .196	+ .03	4	18.65
4237	BD+ 7° 2259	G5	8.5	8.62	8 15.011	3.1503	− .0070	− .001	+ 7 3 46.56	17.709	.207	− .02	4	18.93
4238	BD+42° 2098		*9.03*	9.2	8 20.804	3.6325	− .0359	− .008	+41 49 32.89	17.713	.239	+ .08	4	19.36
4239	BD+17° 2185	G5	8.6	8.91	8 48.436	3.2682	− .0129	− .001	+17 24 59.98	17.732	.214	− .01	4	18.30
4240	BD+46° 1600		8.5	9.30	9 0.630	3.7164	− .0425	− .002	+45 58 21.53	17.740	.244	− .04	4	18.65
4241	BD−15° 3007		9.3	9.1	10 9 1.705	+ 2.9017	+ .0031	+ .0010	−15 22 20.41	−17.741	− .189	+ .012	4	19.69
4242	BD+ 4° 2297		*9.76*		9 2.842	3.1228	− .0058	+ .0018	+ 4 36 31.53	17.742	.205	− .003	4	18.15
4243	BD+50° 1729	F5	*9.02*	8.9	9 19.107	3.8166	− .0509	− .001	+50 9 56.67	17.753	.251	− .01	4	19.16
4244	BD+ 9° 2319		*9.55*	9.2	9 25.201	3.1688	− .0079	− .007	+ 8 48 20.60	17.757	.207	− .01	4	19.17
4245	BD+62° 1116	G	*9.55*		9 26.47	4.2561	− .0934	.000	+62 21 2.09	17.758	.281	.00	4	19.12
4246	BD+40° 2306		*9.75*		10 9 45.088	+ 3.5882	− .0332	+ .0038	+39 49 2.44	−17.770	− .235	− .071	5	18.07
4247	CD−29° 8184	K0	7.7		9 49.988	2.7155	+ .0084	+ .0008	−30 2 1.30	17.773	.177	− .027	4	18.67
4248	Lac 4196	G0	6.44		9 52.667	2.6771	+ .0093	− .0280	−32 38 11.34	17.775	.173	+ .044	5 4	18.52 18.92
4249	CD−23° 9111	K0	9.3		10 5.786	2.8002	+ .0063	− .0030	−23 50 50.54	17.784	.181	− .028	4	19.19
4250	BD+ 2° 2307	F5	*9.03*	8.9	10 17.640	3.0928	− .0044	− .0035	+ 1 51 52.97	17.792	.200	+ .028	4	18.59
4251	BD+87° 85	K0	*8.32*	8.28	10 10 19.27	+18.238	−7.111	− .049	+87 40 33.98	−17.793	−1.218	− .016	4	17.80
4252	CD−26° 7769	K2	9.3		11 12.384	2.7627	+ .0075	− .0015	−26 54 37.80	17.829	.176	− .031	4	19.13
4253	Fedor 1653 .n. pr.	A3	6.58	[illegible]	11 25.52	4.8907	− .1773	− .0048	+71 27 39.07	17.837	.318	− .039	9	18.22
4254	BD+35° 2123		*9.06*	9.1	11 33.781	3.4959	− .0272	.000	+34 47 58.82	17.843	.224	− .02	4	18.49
4255	BD−10° 3027	F0	8.1	8.0	11 41.691	2.9568	+ .0013	+ .0024	−10 47 19.25	17.848	.189	− .054	4	18.38
4256	BD+58° 1246	K2	*8.95*	9.2	10 11 50.068	+ 4.0417	− .0730	− .001	+57 54 45.77	−17.853	− .260	− .01	4	18.63
4257	BD− 0° 2316	K5	8.5	7.88	12 3.322	3.0600	− .0028	− .0022	− 1 11 55.48	17.863	.195	− .018	4	18.39
4258	Brad 1424	G0	5.91	6.25	12 6.706	3.3413	− .0173	− .0152	+23 54 4.43	17.865	.215	+ .021	4	18.67
4259	ζ Leonis	F0	3.65	3.61	12 14.626	3.3400	− .0173	+ .0016	+23 48 59.55	17.870	.213	− .015	100 75	19.56 19.65
4260	32 Urs Maj	A3	5.74	6.32	12 14.66	4.4018	− .1128	− .0144	+65 30 29.26	17.870	.283	− .013	4	18.81

4253. $7^{m}20$, 17″, 167°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4261	λ Urs Maj	A2	3.52	3.70	10 12 16.749	+3.6433	−0.0381	−0.0149	+43 18 52.23	−17.871	−0.233	−0.045	4	19.72
4262	Brad 1426	Ma	5.74	5.44	12 23.187	3.2249	− .0109	− .0016	+14 7 39.81	17.876	.205	− .027	4	19.22
4263	BD+ 8° 2336	K0	*8.83*	8.79	12 42.722	3.1644	− .0077	− .002	+ 8 38 41.89	17.888	.201	+ .01	4	18.91
4264	Rad (90) 2651	A2	6.57	6.73	12 43.576	2.8662	+ .0047	− .0023	−18 54 32.74	17.889	.183	− .007	4	18.50
4265	BD−12° 3129	G5	7.17	7.22	12 51.842	2.9370	+ .0021	− .0001	−12 41 59.51	17.895	.185	+ .012	4	18.94
4266	BD+52° 1470	K0	*8.45*	8.48	10 13 0.968	+3.8483	− .0554	.000	+52 12 30.96	−17.901	− .244	+ .01	4	18.89
4267	BD+67° 646		*9.22*		13 15.97	4.5260	− .1297	+ .0038	+67 33 48.40	17.910	.288	− .040	4	19.46
4268	BD+ 6° 2281		9.3		13 18.268	3.1335	− .0062	− .003	+ 5 47 8.70	17.912	.198	− .02	4	19.70
4269	BD+39° 2336	F5	8.9	9.22	13 29.266	3.5623	− .0324	+ .003	+39 15 51.24	17.919	.224	− .01	4	19.25
4270	BD+70° 607		*8.60*	7.9	13 37.46	4.7418	− .1595	− .0067	+70 16 52.53	17.924	.302	− .030	4	19.00
4271	22 Sextantis	F0	5.40	5.45	10 13 39.258	+2.9922	+ .0001	− .0108	− 7 40 8.30	−17.926	− .187	+ .002	4	19.51
4272	BD−20° 3143	A2	7.22	7.11	13 53.330	2.8413	+ .0056	− .0065	−21 11 23.55	17.935	.177	+ .057	4	19.11
4273	BD+19° 2328		*9.40*	9.4	13 54.983	3.2826	− .0141	− .0090	+19 22 31.88	17.936	.206	+ .015	4	19.19
4274	BD+49° 1939		8.7	8.97	13 57.484	3.7593	− .0481	− .003	+49 1 8.29	17.938	.237	− .01	4	18.61
4275	BD+44° 1973	G5	6.69	6.25	14 0.129	3.6577	− .0398	+ .0054	+44 27 21.07	17.939	.230	− .305	4	18.80
4276	BD+55° 1384	K0	7.96	8.01	10 14 4.063	+3.9278	− .0634	− .001	+55 7 36.39	−17.942	− .247	− .02	4	19.19
4277	CD−24° 8941	K0	9.55		14 9.707	2.7939	+ .0070	− .0015	−25 5 40.87	17.945	.174	− .024	4	19.29
4278	BD+30° 1991	G5	9.31		14 10.315	3.4131	− .0221	.0000	+29 45 18.11	17.946	.214	− .039	4	18.65
4279	BD+ 3° 2346	K	*9.62*		14 16.236	3.1074	− .0049	− .0011	+ 3 20 18.86	17.950	.194	+ .007	4	18.90
4280	59 G Antliæ	B9	5.62	5.63	14 27.478	2.7490	+ .0083	− .0021	−28 35 29.89	17.957	.170	.000	4	19.37
4281	BD+22° 2204	K0	*8.79*	8.8	10 14 45.285	+3.3174	− .0162	− .002	+22 26 41.47	−17.969	− .206	.00	5	17.66
4282	BD+12° 2190	G5	9.3		15 2.804	3.2024	− .0097	− .004	+12 23 6.41	17.980	.198	− .01	4	19.29
4283	BD−14° 3086	A5	8.3	8.28	15 13.682	2.9155	+ .0033	− .0015	−14 55 28.73	17.987	.180	− .012	4	18.52
4284	BD+10° 2139	K2	7.9	7.64	15 13.698	3.1801	− .0086	.000	+10 19 19.45	17.987	.197	− .01	4	18.51
4285	BD+41° 2071		8.6	9.5	15 18.116	3.5830	− .0343	− .0047	+40 52 57.72	17.990	.223	− .091	4	18.91
4286	Grmb 1638	K0	6.22	5.68	10 15 21.180	+3.9024	− .0617	− .0019	+54 37 8.15	−17.992	− .243	− .016	5	20.33
4287	BD−16° 3017	G5	9.8		15 27.877	2.8925	+ .0041	− .0010	−17 1 7.55	17.996	.178	− .030	4	19.93
4288	BD+34° 2111	G	*8.54*	8.57	15 29.813	3.4682	− .0261	− .002	+33 54 9.15	17.997	.215	− .05	4	19.89
4289	BD− 2° 3117	K0	9.8		15 31.647	3.0413	− .0019	+ .0041	− 3 3 13.23	17.998	.187	− .103	4	19.50
4290	γ^1 Leonis *n. pr.*	K0	2.61	3.3	15 33.868	3.2896	− .0146	+ .0215	+20 14 48.73	17.999	.203	− .153	5	19.35
4291	BD− 4° 2841	F2	7.56	8.02	10 15 34.083	+3.0231	− .0011	− .0027	− 4 49 29.14	−18.000	− .186	− .038	4	19.53
4292	BD+14° 2233		*8.92*	9.39	15 36.069	3.2177	− .0106	− .005	+13 51 13.13	18.001	.199	.00	4	19.51
4293	BD+16° 2112	G5	*8.75*	9.1	16 2.987	3.2469	− .0123	− .007	+16 33 56.62	18.018	.200	− .04	4	18.78
4294	BD+69° 569	K0	7.55	7.52	16 3.39	4.6246	− .1469	− .0043	+69 19 44.00	18.019	.287	− .007	4	18.73
4295	BD+51° 1593	G5	*9.50*		16 4.647	3.7938	− .0521	+ .002	+50 55 47.69	18.020	.235	− .04	4	18.83
4296	BD+72° 486	F5	*8.60*	8.08	10 16 23.40	+4.9325	− .1931	− .0107	+72 34 26.26	−18.031	− .306	− .027	5	19.05
4297	CD−26° 7840	K0	8.6		16 24.562	2.7734	+ .0079	− .0022	−27 8 44.36	18.032	.169	+ .002	4	18.59
4298	Brad 1435	B3	6.53	7.0	16 54.166	3.1000	− .0045	− .0005	+ 2 41 33.50	18.051	.189	+ .002	4	18.66
4299	BD− 8° 2899	K0	8.7	8.60	16 55.811	2.9848	+ .0006	− .001	− 8 36 10.79	18.052	.182	+ .04	4	17.64
4300	BD+46° 1622		9.4		17 17.871	3.6792	− .0426	+ .005	+46 19 48.34	18.066	.225	+ .01	5	18.27
4301	μ Urs Maj	K5	3.21	3.34	10 17 34.152	+3.5910	− .0357	− .0073	+41 54 8.69	−18.076	− .218	+ .020	7	21.00
4302	BD+ 7° 2283	F2	*9.14*		17 34.580	3.1438	− .0067	− .005	+ 7 1 18.14	18.076	.190	.00	4	18.64
4303	Paris 12690	A3	6.48	6.68	17 42.806	2.8242	+ .0066	− .0041	−23 18 28.15	18.082	.171	+ .028	4	18.92
4304	BD+21° 2181	G	*9.38*	9.4	17 49.436	3.3001	− .0156	.000	+21 32 15.21	18.086	.200	+ .01	4	18.95
4305	CD−29° 8292	K0	8.2	7.72	17 52.625	2.7464	+ .0090	− .0041	−29 32 4.94	18.088	.164	+ .012	4	18.18
4306	BD+18° 2352	F0	7.77	7.9	10 18 8.566	+3.2585	− .0129	− .0038	+17 55 7.89	−18.098	− .197	− .065	4	18.27
4307	BD+25° 2241	G0	*8.8*	9.1	18 13.616	3.3427	− .0182	− .0068	+25 10 59.35	18.101	.201	− .049	4	18.18
4308	29 H Camelop.	A3	5.64	5.65	18 14.79	9.2136	−1.4476	− .0880	+84 39 35.70	18.102	.568	− .040	8	18.25
4309	BD+31° 2131	A3	*8.68*	8.62	18 19.382	3.4138	− .0228	+ .0022	+30 44 8.33	18.105	.206	− .031	4	19.15
4310	30 H Urs Maj	A0	4.92	5.01	18 22.93	4.3586	− .1149	− .0018	+65 58 17.68	18.107	.265	− .023	4	18.61
4311	Brad 1438	A3	5.83	5.82	10 18 30.106	+3.4635	− .0264	− .0012	+34 18 45.35	−18.111	− .209	− .022	4	19.41
4312	BD+ 1° 2428	F2	*8.33*	8.56	18 38.199	3.0882	− .0039	− .0025	+ 1 33 23.44	18.116	.185	− .027	5	17.92
4313	BD+27° 1883	K0	9.6		18 50.889	3.3678	− .0199	.0000	+27 20 6.58	18.124	.202	− .023	4	17.98
4314	BD−18° 2914	K2	8.5	8.20	18 56.021	2.8760	+ .0050	+ .0010	−19 1 42.83	18.127	.172	+ .008	4	18.30
4315	BD−10° 3051	A2	8.6	8.6	19 2.655	2.9632	+ .0017	− .0014	−10 52 34.36	18.131	.179	− .012	4	18.18
4316	25 Sextantis	B9	6.10	5.79	10 19 23.917	+3.0363	− .0014	− .0033	− 3 40 9.08	−18.145	− .180	− .006	4	18.92
4317	BD+38° 2134		*8.86*	8.7	19 35.396	3.5242	− .0311	− .001	+38 31 50.95	18.152	.211	+ .01	4	18.47
4318	BD+24° 2217	G5	*9.3*		19 39.666	3.3263	− .0173	+ .0048	+24 7 18.25	18.154	.198	− .033	4	18.44
4319	BD+49° 1957		*9.31*	8.7	19 59.357	3.7362	− .0489	+ .002	+49 35 40.95	18.167	.223	+ .03	4	18.62
4320	BD+55° 1389	K0	*8.82*	8.68	20 11.843	3.8872	− .0634	+ .003	+55 18 50.23	18.174	.232	− .04	4	18.48

4290. $3^{m}80$, $3''9$, 118°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4321	BD+33° 1982		*9.71*		10 20 27.103	+3.4358	−0.0249	0.000	+32 51 6.26	−18.184	−0.203	0.00	4	18.67
4322	BD+64° 784		*9.70*		20 29.81	4.2254	− .1008	− .0015	+64 0 6.53	18.185	.251	+ .003	4	19.26
4323	BD− 0° 2337	A0	7.88	7.93	20 40.710	3.0690	− .0030	− .0014	− 0 23 2.45	18.192	.180	− .010	4	18.17
4324	BD+59° 1309	K0	8.76	8.33	20 43.552	4.0198	− .0775	− .005	+59 21 53.04	18.194	.238	+ .01	4	18.34
4325	BD− 2° 3138	K2	9.1	8.77	20 52.571	3.0423	− .0017	− .0004	− 3 6 45.91	18.199	.179	− .018	5	17.57
4326	BD−20° 3169	A0	8.6		10 20 54.379	+2.8564	+ .0060	− .0003	−21 7 21.19	−18.201	− .168	− .006	4	18.90
4327	Pi 10^h 64	Ma	5.92	5.57	21 2.312	3.1632	− .0078	+ .0008	+ 9 11 30.86	18.205	.185	− .043	4	18.49
4328	BD+36° 2065	K0	6.57	6.63	21 8.392	3.4762	− .0279	− .008	+35 49 59.95	18.209	.204	− .06	4	18.14
4329	BD− 3° 2917		9.6	9.1	21 25.129	3.0310	− .0013	+ .0004	− 4 16 30.70	18.219	.176	− .018	4	18.89
4330	30 H Camelop	F2	5.34		21 27.50	7.5878	− .8714	− .0440	+82 57 59.86	18.221	.453	+ .025	176 136	19.92 19.85
4331	BD−14° 3117		9.8		10 21 38.050	+2.9233	+ .0036	+ .0015	−15 2 26.52	−18.227	− .170	+ .025	5	19.60
4332	Lac 4286	K0	6.80	6.39	21 42.382	2.7673	+ .0089	− .0046	−28 47 14.36	18.230	.160	− .005	4	18.79
4333	BD−12° 3162	F2	7.32	7.96	21 56.353	2.9475	+ .0026	− .0050	−12 43 35.72	18.238	.170	+ .042	4	21.92
4334	BD+ 4° 2328	A2	6.62	6.90	22 0.168	3.1148	− .0052	− .0001	+ 4 20 22.25	18.240	.180	− .010	4	18.98
4335	μ Hydræ	K5	4.06	4.1	22 13.240	2.9097	+ .0042	− .0089	−16 25 38.87	18.248	.168	− .084	4	18.08
4336	CD−25° 8036	K0	8.82	7.7	10 22 25.268	+2.8119	+ .0078	− .0005	−25 17 27.62	−18.256	− .162	+ .014	4	18.97
4337	Fedor 1685	K0	7.01	6.84	22 26.56	4.0287	− .0799	− .0068	+60 0 19.57	18.256	.235	− .019	4	18.82
4338	BD+14° 2244	K0	7.41	7.46	22 28.873	3.2106	− .0104	− .004	+14 2 3.35	18.258	.185	+ .01	4	18.22
4339	BD+31° 2142		9.3		22 42.598	3.4073	− .0233	+ .0015	+31 17 48.49	18.266	.196	− .007	4	18.38
4340	BD+47° 1777		8.9	9.2	22 46.393	3.6671	− .0441	− .006	+47 12 59.46	18.268	.212	+ .04	5	18.29
4341	BD+ 0° 2655	K2	*7.71*	7.25	10 22 47.798	+3.0752	− .0032	+ .0008	+ 0 15 35.52	−18.269	− .176	− .040	4	18.15
4342	BD+53° 1406	K	*9.50*		22 55.935	3.8069	− .0571	+ .003	+53 12 10.63	18.274	.220	+ .01	4	18.49
4343	BD+22° 2217	K2	*7.93*	7.71	22 58.692	3.2948	− .0157	.000	+22 1 24.51	18.276	.190	− .01	4	18.40
4344	31 Leo Min *m.*	K0	4.41	4.45	23 15.718	3.4870	− .0293	− .0099	+37 7 3.50	18.286	.201	− .110	7	21.05
4345	BD−16° 3060	K0	8.1	7.72	23 27.262	2.9055	+ .0045	− .0005	−17 0 30.33	18.293	.166	+ .069	4	18.89
4346	α Antliæ	K5	4.42	4.54	10 23 29.336	+2.7489	+ .0100	− .0053	−30 39 36.34	−18.294	− .156	.000	4	19.23
4347	BD+19° 2345	K0	*8.44*	8.36	23 38.165	3.2605	− .0136	.000	+19 0 1.71	18.299	.187	− .02	4	18.17
4348	Wi (2) 10^h 408	F8	7.17	7.03	24 9.048	3.2300	− .0117	− .0100	+16 9 52.15	18.317	.184	− .021	4	18.39
4349	BD− 5° 3071	K0	8.1	7.80	24 13.088	3.0139	− .0002	− .0264	− 6 11 7.86	18.320	.170	− .271	4	19.63
4350	BD+43° 2022 *br.*		*9.54*		24 34.083	3.5760	− .0369	− .003	+42 57 34.46	18.332	.204	.00	4	18.98
4351	BD+10° 2157	G5	8.7	8.42	10 24 42.679	+3.1676	− .0081	− .002	+ 9 58 29.75	−18.337	− .178	− .02	4	18.87
4352	BD− 8° 2932	K0	8.9	8.7	24 43.147	2.9918	+ .0010	.000	− 8 31 16.50	18.338	.168	.00	4	18.45
4353	CD−26° 7942	K0	8.8	8.2	24 56.671	2.7989	+ .0086	+ .0248	−26 57 3.33	18.346	.157	− .270	4	19.18
4354	BD+54° 1378	F8	*9.70*		25 18.067	3.8143	− .0592	+ .001	+54 6 44.00	18.358	.215	.00	4	18.84
4355	BD+74° 437	A0	8.07	8.03	25 18.58	4.9678	− .2195	− .0037	+74 11 28.35	18.358	.283	− .018	4	18.45
4356	Wi (2) 10^h 437	K0	6.92	7.1	10 25 24.697	+3.3697	− .0212	+ .0020	+28 59 27.47	−18.362	− .189	− .004	4	18.46
4357	29 Sextantis	B9	5.24	5.31	25 24.938	3.0509	− .0018	− .0032	− 2 19 45.10	18.362	.171	− .019	4	18.72
4358	36 Urs Maj	F5	4.84	5.15	25 31.081	3.8783	− .0660	− .0214	+56 23 28.74	18.366	.219	− .038	4	19.16
4359	BD+52° 1486	F2	*8.52*	8.8	25 43.340	3.7520	− .0534	− .002	+51 48 42.34	18.373	.211	− .02	4	18.15
4360	BD+21° 2203	F8	9.6	9.1	25 45.836	3,2764	− .0148	− .004	+20 52 17.24	18.374	.183	+ .01	4	18.89
4361	BD−18° 2949	K2	8.5	8.6	10 26 2.429	+2.8942	+ .0053	− .0020	−18 31 36.39	−18.384	− .159	− .001	4	18.36
4362	BD+79° 335		*9.20*	9.3	26 4.20	5.7910	− .3912	− .0152	+78 54 59.71	18.385	.328	− .005	4	19.17
4363	BD+12° 2219		*8.74*	8.57	26 11.189	3.1862	− .0092	− .004	+12 2 28.53	18.389	.177	+ .03	4	18.71
4364	BD−11° 2889	A0	8.5	7.84	26 22.204	2.9626	+ .0025	− .0009	−11 43 20.49	18.396	.164	+ .008	5	18.28
4365	BD+37° 2091		*8.96*		26 46.214	3,4712	− .0291	+ .003	+37 0 18.59	18.409	.193	− .02	4	18.38
4366	BD+24° 2234	K2	*8.2*	8.06	10 26 49.821	+3.3126	− .0176	+ .0022	+24 24 59.88	−18.411	− .183	− .013	4	18.46
4367	BD+ 6° 2316	A0	8.23	7.7	26 51.067	3.1259	− .0058	− .007	+ 5 45 7.91	18.412	.172	.00	4	18.19
4368	BD+ 7° 2317	F5	10.0		26 55.700	3.1378	− .0064	− .004	+ 7 1 45.09	18.415	.173	.00	4	18.98
4369	BD−20° 3196	G0	9.1	8.4	27 2.200	2.8723	+ .0063	− .005	−20 48 24.54	18.419	.156	− .42	4	19.15
4370	BD− 0° 2353	G5	9.0	8.7	27 24.591	3.0670	− .0025	+ .0030	− 0 37 19.81	18.431	.168	− .031	4	18.59
4371	BD+68° 610	K0	*8.90*	9.3	10 27 34.07	+4.3906	− .1317	− .0004	+68 18 23.51	−18.437	− .244	− .006	4	18.77
4372	BD+48° 1873	K2	9.0	8.68	27 38.463	3.6538	− .0450	− .002	+47 57 2.42	18.439	.201	+ .02	4	18.67
4373	BD+63° 909		*8.84*	9.2	27 42.09	4.1128	− .0947	+ .001	+63 16 15.93	18.442	.227	− .03	4 3	18.92 19.49
4374	BD−22° 2937	G5	9.3		28 1.856	2.8522	+ .0073	− .0015	−22 54 17.17	18.453	.154	− .046	4	18.89
4375	BD+56° 1461	K0	*10.02*		28 8.826	3.8534	− .0653	− .003	+56 15 56.16	18.457	.211	− .02	4	18.97
4376	9 H Draconis	G5	5.04	5.00	10 28 20.23	+5.1794	− .2676	− .0079	+76 7 32.81	−18.463	− .286	− .010	9	19.26
4377	BD+39° 2363	K2	*7.32*	7.45	28 29.535	3.5030	− .0323	.000	+39 38 2.23	18.468	.191	− .02	4	19.08
4378	BD+65° 786	G0	*8.74*	8.32	28 32.25	4.2078	− .1078	− .0008	+65 25 2.03	18.470	.230	+ .054	4	18.95
4379	Grmb 1658	A5	4.84	5.0	28 34.218	3.5214	− .0338	− .0125	+40 50 15.27	18.471	.192	− .007	4	19.30
4380	ρ Leonis	B0	3.85	4.05	28 36.007	3.1616	− .0078	− .0005	+ 9 43 7.29	18.472	.170	− .006	107 94	19.71 19.84

4344. 1^m5–7^m0, $0''.5$, 230°.

4350. 11^m0, $1''.3$, 77°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4381	BD+25° 2263	K0	7.74	7.18	10 28 51.810	+3.3200	−0.0182	+0.0015	+25 32 14.56	−18.481	−0.180	−0.019	4	17.96
4382	BD− 9° 3097	F8	9.6		28 56.022	2.9825	+ .0018	.000	− 9 53 41.14	18.483	.161	+ .02	[illegible]	19.46
4383	Brad 1465	A2	5.58	5.80	28 56.695	3.4402	− .0272	− .0028	+35 24 4.39	18.484	.186	− .021	5	19.91
4384	BD+29° 2061	F0	*9.38*	9.5	29 2.494	3.3624	− .0213	+ .0030	+29 17 13.25	18.487	.181	− .026	4	19.36
4385	BD−14° 3138	K0	8.5	8.00	29 10.948	2.9408	+ .0037	.0000	−14 20 25.37	18.492	.158	− .009	[illegible]	19.37
4386	BD+65° 787		*9.40*		10 29 30.70	+4.1643	− .1034	+ .0003	+64 47 6.18	−18.503	− .226	− .016	[illegible]	18.92
4387	BD+17° 2240		*9.44*	9.4	29 36.617	3.2294	− .0121	.000	+16 54 38.56	18.506	.173	+ .02	4	19.32
4388	BD− 4° 2901	F5	9.2		29 53.426	3.0328	− .0006	− .0018	− 4 27 43.18	18.516	.161	− .018	4	18.84
4389	BD+32° 2051	K0	*8.39*	8.43	30 0.014	3.3934	− .0238	.000	+32 5 37.12	18.519	.182	.00	[illegible]	18.65
4390	37 Urs Maj	F0	5.16	5.05	30 1.229	3.8751	− .0690	+ .0083	+57 29 42.86	18.520	.208	+ .031	4	18.58
4391	Wi (2) 10^{h} 524 *br.*	K0	7.39	7.08	10 30 2.170	+3.2793	− .0154	− .0007	+22 0 25.46	−18.521	− .175	.000	4	18.49
4392	44 Hydræ	K2	5.32	5.13	30 12.473	2.8526	+ .0076	− .0002	−23 19 56.85	18.526	.151	+ .008	[illegible]	18.95
4393	BD+42° 2131	K5	7.03	6.60	30 26.634	3.5362	− .0356	+ .0003	+42 19 22.25	18.534	.189	+ .003	[illegible]	18.17
4394	BD+45° 1842		9.4		30 36.142	3.5849	− .0401	− .0037	+45 13 43.88	18.539	.191	− .047	4	18.45
4395	48 Leonis	K0	5.17	5.82	30 37.674	3.1384	− .0065	− .0072	+ 7 21 57.68	18.540	.165	+ .052	4	19.86
4396	BD+14° 2261	G5	*8.82*	9.2	10 30 41.131	+3.1996	− .0102	− .004	+14 1 41.17	−18.542	− .169	+ .01	4 3	18.51 19.59
4397	BD− 5° 3096	G5	9.8		30 47.945	3.0182	+ .0001	.000	− 6 7 48.10	18.546	.159	− .02	5	20.51
4398	Wi (1) 10^{h} 489	K2	6.73	6.34	30 58.642	3.0959	− .0040	− .0022	+ 2 37 5.44	18.552	.163	− .001	5	18.49
4399	CD−24° 9165	F0	8.3	8.37	31 2.092	2.8402	+ .0082	− .0037	−24 40 57.40	18.554	.148	.000	4	19.47
4400	BD+31° 2164	K0	*8.45*	7.7	31 27.355	3.3731	− .0225	− .0008	+30 48 53.17	18.568	.177	+ .007	[illegible]	18.65
4401	BD+35° 2161	G5	*8.82*	8.8	10 31 49.080	+3.4310	− .0272	− .0017	+35 32 19.48	−18.580	− .180	− .093	4	18.34
4402	BD+ 7° 2331	K0	8.5	7.87	31 54.283	3.1383	− .0065	.000	+ 7 27 9.82	18.582	.163	− .08	4	18.78
4403	BD+44° 2001		*9.94*		31 55.548	3.5528	− .0377	+ .0089	+43 46 35.71	18.583	.186	− .041	4	18.81
4404	BD+ 1° 2461 *m.*	F8	8.3	8.56	32 2.875	3.0823	− .0032	− .0033	+ 1 5 58.87	18.587	.160	+ .034	4	19.17
4405	BD+77° 405	A0	*8.80*	8.78	32 29.84	5.2053	− .2869	− .0076	+76 51 28.46	18.602	.275	− .013	4	18.53
4406	Yarn 4514	F8	5.85	6.11	10 32 33.291	+2.9688	+ .0028	+ .0181	−11 48 0.45	−18.604	− .153	− .684	4	18.62
4407	CD−28° 8306 *m.*	A0	6.75	6.7	32 50.911	2.8050	+ .0099	− .0019	−28 21 24.92	18.613	.144	+ .012	4	18.11
4408	BD+ 5° 2359	G5	8.6	8.7	32 52.042	3.1179	− .0053	− .0004	+ 5 12 8.81	18.614	.161	− .034	4	17.97
4409	BD+62° 1138		*9.92*		32 52.12	4.0129	− .0874	− .006	+62 11 23.02	18.614	.206	− .01	[illegible]	18.61
4410	BD+12° 2238		*9.71*		32 57.036	3.1819	− .0092	− .003	+12 25 32.55	18.617	.164	− .04	[illegible]	18.42
4411	Wi (1) 10^{h} 532 *br.*	G0	7.18	7.2	10 33 0.523	+2.9994	+ .0014	− .0079	− 8 25 25.30	−18.618	− .154	− .055	4	18.10
4412	BD+53° 1422	F5	*8.60*	8.6	33 2.096	3.7448	− .0571	+ .003	+53 37 35.79	18.619	.194	− .01	[illegible]	18.26
4413	BD−18° 2980		9.3		33 18.122	2.9070	+ .0058	− .003	−18 33 41.54	18.628	.148	.00	4	18.46
4414	BD+20° 2507	F5	*8.96*	8.48	33 28.472	3.2558	− .0142	− .001	+20 23 32.13	18.634	.167	.00	[illegible]	18.08
4415	CD−26° 8034		10.7	ft.	33 30.033	2.8242	+ .0093	− .0071	−26 46 19.16	18.634	.144	− .063	4 5	18.24 19.06
4416	BD+49° 1977	K0	7.92	7.37	10 33 48.095	+3.6499	− .0477	− .004	+49 37 26.56	−18.644	− .187	.00	4	18.41
4417	BD+84° 239		*9.60*		33 48.24	8.1717	−1.2507	− .0278	+84 30 5.64	18.644	.430	+ .014	5	19.63
4418	37 Leo Min	G0	4.77	4.70	34 13.306	3.3827	− .0239	+ .0005	+32 23 32.16	18.657	.172	− .003	[illegible]	18.97
4419	BD−10° 3105		10.0		34 29.338	2.9833	+ .0023	+ .0025	−10 24 17.79	18.666	.151	+ .002	4	18.44
4420	BD+26° 2110	F2	*8.6*	8.8	34 35.540	3.3120	− .0183	− .0040	+26 11 2.31	18.669	.168	− .013	[illegible]	18.15
4421	φ Hydræ	K0	5.11	5.29	10 34 41.049	+2.9291	+ .0050	− .0076	−16 27 39.31	−18.672	− .147	+ .020	4	18.62
4422	BD+60° 1277		*9.46*		34 56.13	3.9248	− .0789	− .003	+60 22 1.03	18.680	.200	+ .02	[illegible]	18.14
4423	BD+78° 358		*9.22*	9.25	35 5.51	5.3195	− .3218	+ .0057	+77 50 50.10	18.685	.273	+ .006	[illegible]	18.35
4424	Oelt 11017	A2	7.30	7.23	35 21.694	3.5947	− .0432	− .0060	+47 15 30.49	18.694	.181	− .058	4	18.19
4425	BD+33° 2017	G	*9.33*	9.3	35 26.282	3.3876	− .0246	− .004	+33 9 28.57	18.696	.170	− .03	4	17.81
4426	BD−19° 3071		9.8		10 35 27.816	+2.8958	+ .0067	− .0089	−20 9 45.44	−18.697	− .144	− .009	[illegible]	19.18
4427	BD− 1° 2419	K0	8.9	9.1	35 30.313	3.0565	− .0015	− .0026	− 1 55 48.38	18.698	.153	+ .016	[illegible]	18.15
4428	Brad 1458	A0	6.70	6.67	35 40.38	6.0555	− .5121	+ .0082	+80 50 42.53	18.704	.309	+ .013	9	18.46
4429	BD+19° 2363	F8	8.25	8.46	35 44.332	3.2443	−.0137	− .004	+19 39 30.16	18.706	.163	− .03	4	18.00
4430	BD+28° 1914	F5	9.0	8.58	35 47.719	3.3326	− .0202	− .0050	+28 26 1.57	18.707	.167	− .023	5	18.69
4431	BD+15° 2236	A2	*8.47*	8.36	10 36 9.226	+3.2042	− .0109	− .001	+15 22 52.37	−18.719	− .159	− .01	[illegible]	17.98
4432	BD+10° 2183	G	*9.55*		36 43.006	3.1537	− .0075	+ .001	+ 9 40 49.54	18.736	.155	− .01	4	18.98
4433	BD−13° 3187	F0	9.1	9.1	36 48.148	2.9563	+ .0040	.0000	−13 46 41.06	18.739	.145	+ .015	[illegible]	19.03
4434	BD+37° 2110	G0	9.6	8.60	36 58.062	3.4360	− .0291	.000	+37 29 22.93	18.744	.169	.00	6	20.76
4435	BD+24° 2260	G0	9.0	8.9	36 58.799	3.2873	− .0170	− .0031	+24 22 44.21	18.744	.162	− .041	4	18.57
4436	BD−22° 2980	G5	8.9	8.6	10 36 58.954	+2.8777	+ .0077	− .0002	−22 23 6.90	−18.744	− .141	+ .036	4	19.01
4437	BD+64° 807	F8	*8.35*	8.48	37 14.23	4.0584	− .0986	− .0018	+64 24 18.02	18.752	.201	− .002	4	18.06
4438	33 Sextantis	K0	6.40	5.7	37 20.021	3.0618	− .0017	− .0094	− 1 19 14.48	18.755	.150	− .129	4	18.67
4439	35 H Urs Maj	K0	5.23	5.30	37 21.72	4.3334	− .1391	− .0014	+69 29 42.54	18.756	.215	− .022	12	19.36
4440	BD+14° 2281	Ma	7.9	7.61	37 21.936	3.1937	− .0102	− .003	+14 23 47.50	18.756	.157	.00	4	18.99

4391. 14^{m}, 3″.6, 181°; $9^{m}.0$, 11″, 229°.

4404. $9^{m}.0$–$9^{m}.0$, 0″.7, 64°.

4407. $7^{m}.4$–$7^{m}.7$, 0″.4, 300°.

4411. $10^{m}.4$, 1″.6, 73°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4441	BD+33° 2019	F0	9.20		10 37 34.436	+3.3848	−0.0249	+0.001	+33 34 6.55	−18.763	−0.166	0.00	4	19.23
4442	BD− 7° 3094	K2	7.48	7.23	37 51.486	3.0099	+ .0012	+ .001	− 7 38 13.82	18.771	.146	− .02	4	19.26
4443	BD− 3° 2977	F2	8.3	8.22	37 51.731	3.0428	− .0007	− .0022	− 3 39 20.12	18.772	.147	− .011	4	18.93
4444	BD+58° 1278	G5	8.12	8.44	38 0.461	3.8326	− .0707	+ .005	+58 22 31.24	18.776	.188	− .04	4 5	18.87 19.56
4445	Wi (1) 10^{h} 618	K5	7.29	7.06	38 4.186	3.1617	− .0081	− .0033	+10 46 28.61	18.778	.153	− .025	5	18.59
4446	BD− 5° 3126 br.	F5	9.2	8.90	10 38 28.303	+3.0230	+ .0005	.000	− 6 5 59.67	−18.790	− .146	.00	4	18.93
4447	34 Sextantis m.	F5	6.63	6.68	38 29.670	3.1053	− .0044	− .0062	+ 4 0 5.55	18.791	.150	+ .021	5	19.65
4448	BD+17° 2265	K0	8.5	8.5	38 30.356	3.2198	− .0121	− .002	+17 32 37.29	18.791	.156	+ .02	4	19.02
4449	BD+40° 2361	G5	8.61	8.93	38 43.126	3.4707	− .0328	− .002	+40 37 3.99	18.798	.168	.00	4	18.16
4450	BD+ 3° 2404		9.3		38 47.862	3.0972	− .0039	.0000	+ 3 1 6.19	18.800	.148	− .011	4	18.20
4451	Lac 4415	A0	5.73		10 39 0.548	+2.7804	+ .0121	− .0007	−32 17 48.36	−18.807	− .133	− .008	4	19.45
4452	41 Leo Min	A2	5.05	5.04	39 4.138	3.2747	− .0163	− .0083	+23 36 27.41	18.808	.157	+ .005	105 92	19.38 19.59
4453	BD+50° 1760	K0	7.17	7.23	39 7.792	3.6274	− .0484	− .003	+50 13 13.08	18.810	.175	+ .01	4	18.30
4454	Brad 1487 br.	K0	6.34	5.99	39 11.793	3.1144	− .0049	+ .0020	+ 5 10 4.31	18.812	.149	− .033	4	18.45
4455	BD−15° 3116		8.9	8.7	39 35.735	2.9390	+ .0052	− .0048	−16 14 10.09	18.824	.140	− .009	4	17.70
4456	BD+72° 501	K	8.85	8.7	10 40 23.75	+4.5043	− .1737	− .0095	+72 22 21.73	−18.848	− .216	− .021	4	18.12
4457	CD−27° 7653	F2	9.2		40 36.540	2.8303	+ .0101	− .0009	−28 6 35.32	18.855	.132	− .035	5 6	18.74 19.84
4458	Lal 20729	K0	6.81	6.96	40 37.992	2.8749	+ .0085	− .0014	−23 33 55.93	18.855	.134	+ .030	4	18.17
4459	BD+21° 2232	G5	8.5	8.78	40 54.677	3.2519	− .0148	− .003	+21 37 31.95	18.863	.152	− .03	4	17.96
4460	BD+59° 1325	K5	8.62	9.2	41 2.983	3.8383	− .0741	− .005	+59 28 54.82	18.867	.181	+ .02	4	18.16
4461	BD+48° 1892		9.42		10 41 7.784	+3.5783	− .0444	.000	+48 16 37.11	−18.870	− .167	+ .02	4	18.69
4462	BD+ 1° 2477	K0	8.16	8.03	41 22.678	3.0839	− .0029	+ .0005	+ 1 25 54.75	18.877	.144	− .018	4	18.61
4463	BD+13° 2299		8.80	8.94	41 24.734	3.1755	− .0091	− .001	+12 53 18.61	18.878	.147	.00	4	19.10
4464	42 Leo Min	B9	5.37	5.40	41 25.216	3.3438	− .0223	− .0020	+31 6 15.06	18.878	.155	− .041	4	18.65
4465	BD+26° 2128	G5	8.7	8.25	41 55.130	3.2908	− .0180	+ .0028	+26 2 4.91	18.893	.152	− .029	4	18.79
4466	BD+52° 1510	G0	9.20		10 41 55.489	+3.6484	− .0524	.000	+52 12 17.77	−18.893	− .169	+ .01	4	19.06
4467	37 Sextantis	K0	6.29	6.38	41 55.782	3.1259	− .0055	− .0005	+ 6 47 42.57	18.893	.144	− .038	8	18.78
4468	Brad 1492	K0	5.64	5.70	42 6.045	3.2289	− .0131	+ .0062	+19 18 49.58	18.898	.149	− .048	5	18.44
4469	BD− 8° 2997	K0	8.3	8.28	42 10.305	2.9999	+ .0022	− .003	− 9 17 34.69	18.901	.137	+ .06	5 4	18.03 18.76
4470	BD+46° 1663		9.88		42 17.171	3.5407	− .0411	.000	+46 28 32.55	18.904	.163	+ .01	4	18.82
4471	BD+34° 2158	G5	8.4	8.28	10 42 20.000	+3.3721	− .0251	− .001	+33 58 51.87	−18.905	− .156	+ .03	4	18.75
4472	BD+11° 2277	A0	8.88	8.64	42 23.959	3.1639	− .0084	− .0034	+11 36 31.31	18.907	.145	− .119	5	20.15
4473	BD−17° 3225		9.3		42 36.977	2.9321	+ .0059	− .002	−17 37 35.49	18.913	.133	+ .01	4	19.16
4474	BD+ 0° 2701		9.40		42 38.904	3.0723	− .0022	− .0019	− 0 3 32.42	18.914	.140	− .022	4	18.88
4475	BD+66° 683	F8	8.62	8.56	42 48.73	4.0952	− .1115	− .0121	+66 38 28.06	18.919	.190	− .053	4	18.40
4476	Bris 3200	K0	6.86	6.9	10 42 54.573	+2.8611	+ .0095	− .0129	−25 37 39.45	−18.922	− .130	+ .033	4	19.08
4477	BD+35° 2185	G5	9.37	9.4	43 14.931	3.3809	− .0262	+ .003	+35 3 25.91	18.932	.156	− .01	6	21.26
4478	BD+ 8° 2414	K2	9.56	9.2	43 38.652	3.1339	− .0063	− .002	+ 7 58 21.46	18.943	.142	− .02	4	19.50
4479	BD−21° 3154	K0	8.3	7.7	43 39.846	2.8968	+ .0080	− .0100	−21 55 30.66	18.943	.130	+ .010	4	20.18
4480	BD+86° 154	G0	8.10	8.27	43 42.10	9.001	−1.867	− .092	+85 47 12.58	18.945	.421	− .016	4	19.66
4481	BD−19° 3104	F0	8.1	7.98	10 44 0.260	+2.9151	+ .0072	− .0026	−19 55 4.28	−18.953	− .131	+ .015	4	19.78
4482	BD+51° 1625	F2	8.46	8.83	44 3.143	3.6102	− .0495	− .009	+51 1 53.83	18.955	.163	− .09	4	18.85
4483	BD−11° 2949	K2	8.2	7.8	44 10.414	2.9825	+ .0034	+ .0002	−11 44 35.85	18.958	.133	− .024	4	20.23
4484	BD+22° 2274	G0	9.90	9.2	44 12.844	3.2503	− .0151	− .015	+22 15 40.85	18.959	.145	+ .02	4	20.14
4485	BD+44° 2020	F5	7.62	7.72	44 18.969	3.4963	− .0375	− .0022	+44 21 5.17	18.962	.157	− .037	4	19.83
4486	Wi (1) 10^{h} 733	Ma	6.19	6.06	10 44 35.815	+3.0611	− .0014	− .0013	− 1 32 10.47	−18.970	− .136	− .006	5	19.30
4487	BD+62° 1145		8.92	8.2	44 49.31	3.8873	− .0843	− .026	+62 8 31.69	18.976	.175	− .10	4	20.13
4488	BD+39° 2381		10.19	ft.	44 54.270	3.4247	− .0307	.000	+39 18 3.14	18.979	.152	+ .03	6 4	19.06 20.77
4489	BD+75° 425	F5	8.82	8.38	45 1.57	4.7282	− .2293	.0000	+75 27 31.31	18.982	.213	− .030	4	20.17
4490	*l* Leonis	A0	5.27	5.18	45 3.195	3.1559	− .0079	− .0001	+10 58 7.92	18.983	.139	− .033	60 41	19.33 20.10
4491	Brad 1501	F5	6.12	6.13	10 45 30.096	+3.3034	− .0198	− .0002	+28 23 48.30	−18.995	− .143	+ .021	4	18.91
4492	ν Hydræ	K0	3.32	3.50	45 40.588	2.9524	+ .0054	+ .0065	−15 46 28.84	19.000	.129	+ .193	53 42	19.61 20.02
4493	BD−13° 3223	K5	8.9	8.6	45 57.974	2.9701	+ .0044	− .0002	−13 35 54.26	19.008	.130	.000	4	18.07
4494	BD− 3° 3002		10.0		46 26.758	3.0467	− .0003	− .0009	− 3 31 42.65	19.022	.132	− .008	4	18.68
4495	BD+70° 633	G0	8.20	8.2	46 30.75	4.2418	− .1411	− .0053	+70 11 14.50	19.024	.187	− .108	4	18.65
4496	BD+17° 2281		9.35		10 46 39.308	+3.2017	− .0116	− .006	+17 3 48.15	−19.027	− .138	− .01	4	18.92
4497	BD+ 6° 2363	F8	7.9	8.32	46 44.050	3.1169	− .0051	− .003	+ 6 0 36.61	19.030	.134	− .02	6	20.12
4498	BD+43° 2052	K0	8.9	8.4	46 52.065	3.4592	− .0349	+ .002	+42 40 32.54	19.033	.151	− .03	4	19.10
4499	BD−15° 3142	K0	10.0		47 5.412	2.9521	+ .0056	− .0010	16 5 25.77	19.039	.126	− .006	4	19.51
4500	BD+24° 2281	G5	9.3	8.68	47 7.683	3.2572	− .0161	− .001	+23 49 30.41	19.040	.141	− .02	4	19.18

4446. $11^{\mathrm{m}}4$, $2''2$, 212°.

4447. $6^{\mathrm{m}}9$–$8^{\mathrm{m}}1$, $0''5$, 261°.

4454. $7^{\mathrm{m}}4$, $0''0$, 240°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4501	BD+59° 1332	G	*8.50*	8.5	10 47 8.044	+3.7624	−0.0702	−0.036	+58 47 49.84	−19.041	−0.165	−0.12	4	18.86
4502	BD− 5° 3153	F8	8.85	8.93	47 9.742	3.0327	+ .0007	− .0018	− 5 28 7.46	19.041	.130	− .034	4	18.89
4503	CD−23° 9571 br.	G5	8.8		47 29.846	2.8940	+ .0089	− .0003	−23 15 51.20	19.050	.124	− .072	4	19.13
4504	BD+73° 505		*9.23*		47 32.43	4.4829	− .1873	− .0046	+73 34 57.36	19.052	.195	+ .003	[illegible]	19.72
4505	BD+32° 2079	G0	*7.97*	8.13	47 33.160	3.3302	− .0226	− .0027	+31 47 34.82	19.052	.144	− .010	4	19.38
4506	BD+ 1° 2492		*8.67*	8.5	10 47 39.422	+3.0837	− .0028	− .0007	+ 1 31 15.37	−19.055	− .132	− .016	4	19.38
4507	BD−17° 3247		9.3		47 40.221	2.9413	+ .0063	− .006	−17 34 56.99	19.055	.124	+ .05	4 3	19.90 21.23
4508	Pi 10ʰ 171	K0	6.58	6.23	47 44.532	3.6212	− .0531	− .0072	+52 55 46.59	19.057	.156	− .062	4	20.06
4509	BD+ 8° 2423	A2	8.3	8.12	48 14.890	3.1352	− .0065	− .002	+ 8 38 19.05	19.071	.132	+ .05	4	18.78
4510	BD+10° 2214		*9.48*		48 26.800	3.1494	− .0076	.000	+10 34 43.32	19.076	.133	.00	4	19.21
4511	BD+67° 673	F0	*9.30*		10 48 27.69	+4.0512	− .1132	− .0028	+67 14 49.16	−19.077	− .173	− .030	4	18.61
4512	BD+15° 2257	F5	8.7	9.2	48 38.530	3.1837	− .0103	− .002	+15 9 55.79	19.081	.133	− .02	[illegible]	18.63
4513	BD+50° 1775	A2	7.77	7.7	48 48.474	3.5536	− .0461	+ .003	+49 39 24.03	19.086	.150	+ .01	[illegible]	19.13
4514	46 Leo Min.	K0	3.92	3.7	48 50.489	3.3549	− .0252	+ .0074	+34 38 48.31	19.087	.141	− .290	4	17.94
4515	BD+13° 2319	A3	8.5	8.7	49 9.479	3.1678	− .0090	− .003	+13 10 19.29	19.095	.133	.00	4	19.23
4516	BD+55° 1422	K0	*7.78*	7.98	10 49 17.549	+3.6572	− .0587	− .002	+55 13 39.47	−19.099	− .154	− .04	[illegible]	18.70
4517	CD−27° 7744	K5	8.2		49 20.536	2.8575	+ .0112	− .0030	−27 57 7.09	19.100	.119	− .014	[illegible]	19.01
4518	ω Urs Maj.	A0	4.84	4.72	49 22.824	3.4589	− .0360	+ .0042	+43 36 58.34	19.101	.145	− .035	5	18.40
4519	BD− 7° 3133	F8	9.3		49 29.672	3.0184	+ .0018	+ .002	− 7 38 43.55	19.104	.125	+ .02	[illegible]	19.52
4520	CD−29° 8690		9.8		49 47.725	2.8445	+ .0120	− .0018	−29 31 15.89	19.112	.117	− .015	[illegible]	[illegible]
4521	Lal 20978	G0	5.84	5.82	10 50 19.392	+2.9779	+ .0045	+ .0006	−13 19 55.74	−19.126	− .122	+ .028	4	18.82
4522	BD+ 3° 2432		*9.31*		50 20.825	3.0943	− .0034	− .0006	+ 3 5 16.11	19.127	.127	− .024	4	19.00
4523	BD+36° 2133	K	*9.47*		50 24.445	3.3693	− .0270	+ .001	+36 34 51.71	19.128	.139	.00	4	18.41
4524	BD+61° 1211 br.		*8.72*	9.1	50 43.42	3.7874	− .0772	− .007	+60 53 46.01	19.136	.156	+ .01	4	18.86
4525	BD+33° 2053		*9.59*		50 48.585	3.3283	− .0234	+ .001	+32 44 59.83	19.139	.137	.00	4	18.21
4526	BD− 9° 3167	A0	8.1	7.7	10 50 49.469	+3.0052	+ .0028	.000	− 9 39 30.50	−19.139	− .121	.00	4	18.65
4527	CD−25° 8319	K5	9.75		50 50.743	2.8853	+ .0100	+ .0006	−25 15 27.77	19.140	.117	− .050	5	19.42
4528	BD+29° 2104	K5	*9.41*		50 56.855	3.2897	− .0198	− .0048	+28 41 1.85	19.142	.135	− .027	6	19.89
4529	BD+69° 592	F8	8.92	8.6	51 3.03	4.1048	− .1265	− .0052	+69 0 30.20	19.145	.169	+ .012	4	19.28
4530	BD−11° 2974	K0	7.70	7.72	51 15.081	2.9910	+ .0038	+ .0010	−11 41 42.50	19.150	.120	+ .020	4	18.76
4531	54 Leonis br.	A0	4.51	4.9	10 51 17.091	+3.2582	− .0169	− .0055	+25 10 36.52	−19.151	− .132	− .017	4	18.54
4532	Brad 1517 m.	F2	6.05	5.95	51 35.466	3.0807	− .0024	+ .0068	+ 1 9 50.09	19.159	.124	− .011	4	19.02
4533	BD+46° 1675	K0	*8.26*	8.40	51 38.040	3.4822	− .0396	− .003	+46 11 49.38	19.160	.141	.00	[illegible]	18.26
4534	BD+10° 2223		*9.04*	8.9	51 38.752	3.1458	− .0074	− .014	+10 32 58.61	19.160	.127	− .05	[illegible]	18.47
4535	CD−23° 9611	F8	9.8		51 39.030	2.9012	+ .0094	− .0009	−23 35 47.41	19.160	.117	− .014	[illegible]	19.16
4536	BD+18° 2420	G5	7.32	7.4	10 51 40.397	+3.2047	− .0123	− .005	+18 34 46.42	−19.161	− .130	+ .02	4	18.90
4537	BD+34° 2183	K2	9.2	8.50	51 54.702	3.3347	− .0242	− .001	+33 48 29.43	19.167	.134	.00	4	18.70
4538	BD+54° 1405	K2	*8.80*	8.48	51 56.962	3.6133	− .0554	+ .005	+54 7 23.73	19.168	.146	− .02	5	19.63
4539	BD− 0° 2391	F0	8.1	7.74	52 0.672	3.0646	− .0012	− .0076	− 1 11 28.11	19.170	.123	+ .012	[illegible]	18.74
4540	BD−19° 3138		9.6		52 27.832	2.9327	+ .0076	− .0030	−19 50 22.00	19.181	.116	+ .032	4	18.71
4541	BD−21° 3192	Ma	7.7	7.84	10 52 58.109	+2.9201	+ .0086	− .0038	−21 36 22.36	−19.194	− .115	+ .006	[illegible]	18.49
4542	BD+38° 2197		*9.01*	8.6	52 59.041	3.3745	− .0286	.000	+38 4 34.73	19.194	.134	− .01	4	18.41
4543	BD+45° 1876		*9.56*		53 3.099	3.4548	− .0374	− .002	+44 47 29.63	19.196	.138	− .01	4	18.40
4544	BD+82° 320	A5	*9.16*	8.5	53 22.76	5.6946	− .5333	− .0124	+81 41 19.41	19.204	.230	+ .001	4	18.85
4545	Brad 1508	G5	6.26	6.26	53 36.00	4.9001	− .3029	− .0247	+78 11 57.33	19.210	.196	− .027	8	18.46
4546	BD+ 1° 2505		*9.27*		10 53 38.159	+3.0775	− .0021	− .0034	+ 0 43 5.68	−19.211	− .120	− .015	4	18.65
4547	BD− 2° 3259		8.7	8.69	54 8.193	3.0525	− .0002	− .0030	− 3 3 22.81	19.223	.118	− .010	[illegible]	17.68
4548	BD+56° 1491	A7	*9.26*		54 17.376	3.6356	− .0601	− .001	+56 7 20.90	19.227	.142	− .01	[illegible]	19.18
4549	Wi (2) 10ʰ 1021	K0	6.94	6.66	54 20.993	3.2105	− .0132	+ .0015	+20 3 2.97	19.228	.124	− .013	[illegible]	18.98
4550	BD+26° 2159	G5	8.7	8.88	54 25.907	3.2576	− .0175	+ .0007	+26 7 12.37	19.230	.126	− .063	[illegible]	18.13
4551	BD+22° 2295	F8	*8.62*	8.95	10 54 34.266	+3.2255	− .0146	− .002	+22 6 0.89	−19.234	− .125	+ .02	4	18.51
4552	47 Urs Maj.	G0	5.14	5.00	54 59.468	3.3962	− .0318	− .0280	+40 51 28.36	19.244	.130	+ .050	5	20.47
4553	Lal 21100	K0	6.96	6.6	55 0.792	2.9427	+ .0076	+ .0023	−19 10 28.07	19.245	.112	− .093	[illegible]	19.38
4554	Pi 10ʰ 203	Ma	6.22	6.10	55 5.185	3.3493	− .0268	+ .0064	+36 31 23.01	19.246	.128	− .056	[illegible]	18.52
4555	Wi (1) 10ʰ 936	A0	7.06	7.18	55 17.240	3.0077	+ .0032	− .0028	− 9 53 47.92	19.251	.113	+ .005	[illegible]	19.20
4556	BD+57° 1300	G0	*8.88*	9.5	10 55 22.636	+3.6548	− .0637	− .016	+57 25 38.15	−19.254	− .141	− .06	[illegible]	19.46
4557	Wi (1) 10ʰ 937	F5	6.36	6.3	55 30.350	3.1525	− .0080	− .0157	+12 8 1.76	19.257	.120	+ .041	[illegible]	18.88
4558	BD+70° 643	G5	*8.15*	8.27	55 32.42	4.0926	− .1333	− .0023	+70 0 51.78	19.258	.157	− .046	4	18.92
4559	α Crateris	K0	4.20	4.45	55 52.533	2.9537	+ .0070	− .0326	−17 52 20.69	19.266	.111	+ .121	4	19.58
4560	BD−14° 3237	K0	8.3	7.58	55 56.250	2.9739	+ .0057	+ .0027	−15 0 2.97	19.267	.111	+ .009	4	19.08

4503. 12$^{\mathrm{m}}$8, 4$''$4, 90°.   4524. 10$^{\mathrm{m}}$9, 4$''$9, 321°.   4531. 6$^{\mathrm{m}}$30, 6$''$5, 108°.   4532. 6$^{\mathrm{m}}$05-10$^{\mathrm{m}}$, 0$''$8, 32°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4561	BD+ 4° 2406		9.7		10 56 13.870	+3.0977	−0.0035	−0.0034	+ 3 53 56.90	−19.274	−0.115	−0.020	4	19.23
4562	BD+50° 1786	G5	9.90		56 20.274	3.5093	− .0457	− .002	+49 59 22.38	19.277	.132	+ .01	4	19.42
4563	BD+27° 1966	G5	9.3		56 25.173	3.2604	− .0181	+ .0001	+27 9 3.24	19.279	.122	+ .036	4	19.66
4564	d Leonis	K0	5.05	4.79	56 25.776	3.0986	− .0036	+ .0006	+ 4 2 50.34	19.279	.115	− .021	[illegible] 76	19.93 20.18
4565	BD+29° 2110	F0	8.16	8.02	56 26.891	3.2809	− .0202	+ .0008	+29 38 53.58	19.279	.123	− .009	4	18.88
4566	BD−17° 3277		10.0		10 56 27.417	+2.9581	+ .0068	− .0010	−17 23 31.72	− 19.280	− .112	− .007	4	20.17
4567	BD+76° 410		8.72	8.6	56 35.44	4.5739	− .2359	− .0037	+76 19 58.00	19.283	.174	− .022	4	18.60
4568	BD+ 6° 2384	A5	5.08	5.57	56 36.046	3.1145	− .0050	− .004	+ 6 31 53.71	19.283	.116	− .04	4	19.72
4569	BD+24° 2300	G5	8.41	8.50	56 40.302	3.2389	− .0161	+ .0026	+24 29 55.53	19.285	.120	− .186	5	20.33
4570	CD−25° 8383	Kp	9.0	8.50	56 41.990	2.8995	+ .0107	+ .0011	−25 25 33.06	19.285	.107	− .041	4	19.41
4571	β Urs Maj	A0	2.44	2.9	10 57 1.476	+3.6271	− .0616	+ .0102	+56 48 41.80	−19.293	− .135	+ .028	4	19.60
4572	BD− 4° 2996	A3	8.80	8.6	57 5.269	3.0394	+ .0011	− .0006	− 5 15 38.30	19.295	.112	− .016	4	19.54
4573	CD−27° 7821		9.0		57 36.787	2.8838	+ .0119	− .0021	−27 43 54.26	19.307	.105	+ .004	4	19.74
4574	BD+23° 2297	G5	8.64	8.70	57 45.534	3.2251	− .0150	− .011	+23 1 34.05	19.310	.118	.00	4	18.65
4575	BD+ 9° 2439	G5	8.5	9.1	58 5.310	3.1311	− .0064	− .008	+ 9 18 0.94	19.318	.114	− .02	4	19.18
4576	BD+ 6° 2393		9.42	9.4	10 58 5.498	+3.1109	− .0047	− .001	+ 6 6 45.83	−19.318	− .113	+ .02	4	19.10
4577	BD+40° 2393		9.34	9.5	58 16.862	3.3764	− .0311	+ .004	+40 30 6.05	19.323	.123	.00	4	19.05
4578	Rad (45) 2610	F8	7.12	7.31	58 26.34	3.7422	− .0797	− .0185	+62 5 11.02	19.326	.136	− .082	4	19.71
4579	Wi (1) 10h 991	G5	7.13	6.77	58 32.560	3.0536	.0000	− .0018	− 3 4 54.11	19.329	.110	− .023	4	18.66
4580	BD+ 2° 2379		8.6	7.7	58 39.339	3.0831	− .0023	+ .0003	+ 1 40 37.99	19.331	.110	− .021	4	20.15
4581	BD+11° 2306		9.80		10 58 42.959	+3.1425	− .0075	+ .001	+11 11 14.23	−19.333	− .112	− .01	4	18.95
4582	α Urs Maj m.	K0	1.95	2.38	58 48.25	3.7410	− .0800	− .0168	+62 10 59.93	19.335	.135	− .074	4	18.44
4583	BD+33° 2072	K5	8.22	8.28	59 18.684	3.2976	− .0228	+ .001	+32 44 7.59	19.347	.118	− .01	4	18.90
4584	BD− 6° 3300	K0	7.46	7.40	59 47.626	3.0285	+ .0022	+ .003	− 7 15 19.49	19.357	.107	− .08	4	19.00
4585	BD+17° 2309	F2	8.80	8.83	59 51.241	3.1766	− .0107	− .002	+16 41 16.49	[illegible]	.112	− .01	4	18.78
4586	CD−29° 8822		9.8		10 59 51.978	+2.8785	+ .0128	+ .0053	−29 15 37.55	−19.359	− .100	+ .075	5	19.65
4587	BD+45° 1890	G5	9.03	9.2	10 59 58.064	3.4259	− .0378	+ .0015	+45 35 19.56	19.361	.121	− .011	4	19.73
4588	BD+15° 2282 br.	K2	8.60	8.08	11 0 1.469	3.1633	− .0094	− .002	+14 40 49.65	19.363	.111	+ .01	4	19.20
4589	BD− 0° 2401	A0	6.79	6.79	0 13.752	3.0676	− .0010	+ .0015	− 0 50 47.86	19.367	.107	− .019	4	18.86
4590	Wi (2) 10h 1143	G5	7.32	6.72	0 16.909	3.2867	− .0219	− .0022	+31 52 4.11	19.369	.115	+ .020	4	18.70
4591	BD+68° 630	G5	9.45		11 0 35.74	+3.9203	− .1125	− .0046	+67 59 42.39	−19.376	− .138	− .037	4	19.22
4592	χ Leonis	F0	4.66	4.67	0 53.489	3.1192	− .0054	− .0233	+ 7 46 7.65	19.382	.108	− .047	87 67	19.86 20.04
4593	BD+25° 2335	G0	7.49	7.21	0 59.524	3.2360	− .0167	− .0297	+25 38 6.24	19.384	.112	− .082	4	17.94
4594	BD+60° 1309	F5	8.72	9.4	1 5.48	3.6675	− .0717	− .005	+60 16 2.77	19.387	.127	+ .01	4	19.69
4595	BD+48° 1915		9.49	8.9	1 12.446	3.4558	− .0422	− .002	+48 29 20.24	19.389	.120	− .02	4	19.50
4596	BD+53° 1463	K0	7.30	7.2	11 1 13.696	+3.5186	− .0506	− .006	+52 45 31.23	−19.390	− .122	− .02	4	18.97
4597	χ¹ Hydræ m.	F5	5.06	5.3	1 28.515	2.9017	+ .0119	− .0153	−26 51 40.93	19.395	.098	− .013	4	19.56
4598	Wi (1) 10h 1046	A3	6.14	6.0	1 33.021	3.0093	+ .0039	+ .0001	−10 39 18.45	19.397	.102	− .088	4	19.31
4599	BD+22° 2311	G5	9.53		1 43.908	3.2087	− .0141	− .003	+22 2 6.14	19.401	.110	.00	4	18.92
4600	BD− 6° 3305	K0	7.7	7.5	2 2.982	3.0342	+ .0020	.000	− 6 34 32.80	19.408	.102	− .04	4	17.63
4601	BD+43° 2080		9.4		11 2 18.206	+3.3900	− .0347	.000	+43 37 25.15	−19.413	− .115	+ .02	4	18.66
4602	Wi (2) 10h 1188	K5	6.59	6.46	2 29.685	3.1816	− .0115	+ .0007	+18 10 13.55	19.418	.110	− .036	5	19.88
4603	BD−12° 3346	K0	8.1	7.25	2 30.368	2.9962	+ .0051	+ .0008	−12 59 3.99	19.418	.101	− .026	4	18.88
4604	BD+29° 2123	F2	9.00	9.22	2 34.311	3.2551	− .0191	+ .0008	+28 49 42.41	19.419	.110	− .014	4 3	19.20 19.86
4605	Lal 21298	A0	7.22	7.1	2 37.031	2.9474	+ .0089	− .0037	−20 44 4.08	19.420	.098	− .003	4	19.16
4606	p⁴ Leonis br.	G5	[illegible]	5.2	11 2 49.424	+3.0865	− .0025	− .0251	+ 2 23 24.52	−19.425	− .103	− .087	4	18.23
4607	BD− 4° 3014	G5	9.1		2 52.922	3.0430	+ .0013	+ .0012	− 5 9 20.36	19.427	.101	+ .022	4	19.47
4608	Lal 21235	F0	6.87	7.00	2 58.36	4.1097	− .1544	− .0115	+72 23 32.16	19.428	.139	− .018	8	18.87
4609	BD+35° 2211	F8	9.18	9.30	3 2.214	3.3053	− .0250	+ .002	+35 16 32.29	19.429	.110	+ .01	4	18.96
4610	BD+51° 1650	G0	9.92		3 6.102	3.4777	− .0466	− .001	+50 57 57.22	19.431	.116	− .02	5	19.61
4611	BD−14° 3262	K5	8.5	7.81	11 3 7.540	+2.9840	+ .0061	− .0022	−15 7 6.74	−19.431	− .098	− .036	4	19.78
4612	BD+13° 2358	K0	7.62	7.36	3 14.588	3.1510	− .0084	.000	+13 26 48.08	19.434	.105	+ .01	4	19.34
4613	BD−17° 3304	K5	8.7	8.8	3 27.095	2.9706	+ .0073	+ .0020	−17 22 4.78	19.438	.098	− .040	4	19.40
4614	CD−25° 8464 m.	A5	10.6	ft	3 27.972	2.9172	+ .0113	− .0020	−25 28 50.40	19.438	.096	+ .003	4	19.53
4615	BD+ 9° 2451		9.58		3 39.611	3.1231	− .0059	− .001	+ 8 48 43.68	19.443	.103	.00	4	18.91
4616	Carr 1651	G0	7.06	7.18	11 4 1.07	+5.4225	− .5352	− .0437	+82 10 9.96	−19.450	− .183	− .190	8	18.70
4617	CD−23° 9752	K0	8.4	8.13	4 4.312	2.9328	+ .0103	− .0011	−23 25 30.40	19.451	.095	− .008	5	19.38
4618	BD+12° 2304		9.65		4 11.266	3.1402	− .0076	− .001	+11 49 25.38	19.454	.103	− .04	4	19.38
4619	BD+ 5° 2450	F5	8.45	7.70	4 12.274	3.1003	− .0037	− .0004	+ 4 53 32.52	19.454	.100	− .034	4	19.04
4620	BD+54° 1422	G5	8.58	8.08	4 28.873	3.5157	− .0580	− .004	+54 6 38.58	19.460	.115	− .11	4	19.54

4582. 1m95 10m, 0″.5.
4588. 14m, 4″.0, 226°.
4597. 5m7 6m0, 0″.2, 46°.
4606. 11m5, 2″.4, 93°.
4614. 10m8–12m5, 0″.9, 305°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4621	Brad 1541 *br.*	A2	5.63	5.61	11 4 31.734	+3.2227	−0.0162	+0.0002	+25 5 30.66	−19.461	−0.104	−0.002	4	18.68
4622	BD−18° 3109	G0	9.3		4 45.754	2.9643	+ .0081	− .006	−18 46 33.37	19.466	.095	+ .05	4	19.72
4623	BD+67° 684	F0	*5.09*	7.4	4 50.47	3.8301	− .1044	+ .0098	+67 11 26.47	19.467	.125	− .039	4	19.94
4624	Brad 1544	A2	5.49	5.15	4 51.604	2.9059	+ .0125	− .0061	−27 38 47.71	19.468	.093	− .026	4	19.40
4625	Rad (45) 2612	A2	7.17	7.79	5 6.65	7.693	−1.698	− .030	+86 4 28.80	19.473	.258	− .002	8	19.06
4626	ψ Urs Maj	K0	3.15	3.57	11 5 10.303	+3.3886	− .0362	− .0055	+44 55 58.26	−19.474	− .109	− .038	6	20.84
4627	BD+33° 2084	K0	7.26	7.0	5 34.600	3.2766	− .0226	− .007	+32 57 54.30	19.483	.104	− .01	4	17.64
4628	BD+ 8° 2464	K2	9.3	8.9	5 35.094	3.1165	− .0053	+ .002	+ 7 56 0.94	19.483	.099	− .10	[illegible]	18.36
4629	Oelt 11501	F5	7.24	7.40	5 55.188	3.4225	− .0412	− .0033	+48 13 51.20	19.490	.109	+ .048	[illegible]	18.18
4630	BD+27° 1987	F5	*9.46*		6 11.209	3.2308	− .0174	+ .0006	+26 56 43.35	19.495	.102	− .030	4	17.99
4631	BD− 8° 3095	K0	8.1	8.00	11 6 31.668	+3.0239	+ .0034	− .002	− 8 58 55.61	−19.502	− .094	+ .03	4	18.87
4632	BD−21° 3255		10.0	ft.	6 38.242	2.9517	+ .0095	+ .0012	−21 25 37.68	19.504	.091	+ .044	3 4	17.80 19.69
4633	BD+16° 2226	F8	*9.40*	8.7	6 45.073	3.1592	− .0098	− .004	+15 41 34.13	19.507	.097	− .01	4	19.18
4634	BD+10° 2257	K0	*9.19*		6 45.427	3.1285	− .0066	− .002	+10 17 11.89	19.507	.096	+ .04	4	18.61
4635	BD+ 0° 2754	F5	9.44		6 47.780	3.0757	− .0014	− .0013	+ 0 33 58.56	19.507	.095	− .007	4	19.59
4636	BD−10° 3212	K0	8.7	7.61	11 7 3.264	+3.0142	+ .0044	− .0026	−10 49 55.98	−19.513	− .092	+ .024	4	19.06
4637	Oelt 11509	A2	6.42		7 5.50	3.8572	− .1141	+ .0054	+68 42 22.77	19.513	.120	+ .002	12	19.02
4638	CD−25° 8510	F8	10.8	ft.	7 22.732	2.9277	+ .0115	− .0042	−25 29 21.56	19.519	.089	− .022	4	18.96
4639	BD+19° 2426	F2	*8.19*	8.26	7 26.305	3.1781	− .0118	+ .002	+19 7 39.45	19.520	.097	− .04	4	19.20
4640	BD+ 3° 2470	A3	*8.78*	8.65	7 26.945	3.0885	− .0025	− .0035	+ 2 58 18.12	19.520	.094	− .004	5 6	19.74 18.83
4641	BD+41° 2167		*9.42*		11 7 28.065	+3.3384	− .0310	− .001	+41 11 14.29	−19.521	− .102	− .02	5 4	18.99 19.96
4642	BD− 0° 2415	K2	8.5	8.70	7 35.355	3.0692	− .0007	− .0032	− 0 40 1.15	19.523	.092	− .012	5 4	18.52 19.16
4643	β Crateris	A2	4.52	4.30	7 43.263	2.9482	+ .0101	+ .0001	−22 23 19.95	19.526	.089	− .101	4	19.51
4644	BD−14° 3279	F0	9.8	8.6	7 46.979	2.9952	+ .0061	− .0012	−14 23 57.68	19.527	.091	− .022	4	19.46
4645	Grmb 1746	A2	6.48	6.7	8 5.650	3.5066	− .0551	− .0011	+55 19 45.59	19.533	.107	− .001	4	18.94
4646	BD+40° 2406		*9.92*		11 8 21.742	+3.3214	− .0289	− .006	+39 47 22.49	−19.539	− .100	+ .01	4	19.70
4647	Cape (80) 6211	Ma	6.46		8 23.294	2.8863	+ .0151	+ .0009	−31 59 56.13	19.539	.085	− .002	4	20.03
4648	CD−23° 9801	K0	8.9	8.6	8 51.644	2.9448	+ .0107	+ .0010	−23 23 7.29	19.548	.087	− .022	4	18.70
4649	CD−29° 8919	A2	9.6		9 13.926	2.9072	+ .0138	− .0026	−29 24 39.76	19.555	.085	− .010	4	19.21
4650	BD+50° 1803	K0	7.42	7.20	9 15.594	3.4261	− .0443	− .004	+50 17 29.82	19.556	.101	− .01	4	18.47
4651	BD+31° 2245	G5	*9.49*	9.1	11 9 30.117	+3.2471	− .0203	+ .001	+30 50 4.33	−19.561	− .095	− .05	4	18.72
4652	BD− 2° 3307		9.6		9 38.451	3.0557	+ .0007	− .0018	− 3 20 2.90	19.563	.090	− .011	4	19.52
4653	δ Leonis	A3	2.58	2.98	9 51.356	3.1838	− .0129	+ .0106	+20 57 43.91	19.567	.092	− .145	100 79	20.27 20.30
4654	BD−12° 3376	K5	8.3	7.86	10 1.410	3.0094	+ .0053	− .0010	−12 21 29.13	19.570	.086	.000	4	18.81
4655	θ Leonis	A0	3.41	3.6	10 2.616	3.1549	− .0096	− .0043	+15 52 1.57	19.571	.091	− .086	4	19.67
4656	BD+20° 2573	G5	7.9	7.3	11 10 10.344	+3.1803	− .0128	.000	+20 28 0.14	−19.573	− .092	.00	4 3	18.39 18.78
4657	BD−16° 3210	G5	7.22	6.83	10 11.474	2.9876	+ .0073	− .0028	−16 27 4.69	19.574	.086	+ .054	4	19.43
4658	BD+38° 2219	G5	*7.62*	7.62	10 40.200	3.2958	− .0270	.000	+38 0 52.91	19.583	.094	+ .01	5 4	18.04 18.78
4659	BD+59° 1359	G5	*9.18*		10 42.122	3.5534	− .0656	− .013	+59 18 54.50	19.583	.102	+ .01	4	18.68
4660	BD− 4° 3036		10.0		10 45.664	3.0497	+ .0014	+ .0002	− 4 37 28.20	19.584	.086	− .018	4	18.91
4661	Brad 1549	Ma	4.87	4.80	11 10 57.108	+3.1963	− .0147	− .0011	+23 31 54.48	−19.588	− .091	− .010	4	19.01
4662	BD+ 6° 2425	F0	*9.19*	9.22	11 5.878	3.1019	− .0038	− .004	+ 5 53 26.94	19.591	.088	+ .04	4	18.62
4663	BD+83° 323		*9.34*		11 11.57	5.4203	− .6136	− .0156	+83 7 47.71	19.592	.158	+ .017	5	18.20
4664	Lal 21511	A0	6.78	7.08	11 19.664	2.9746	+ .0086	− .0045	−19 12 5.36	19.595	.083	− .014	4	19.07
4665	BD+44° 2072	G0	9.5	9.1	11 30.212	3.3480	− .0347	− .003	+44 26 51.47	19.598	.094	.00	4	19.10
4666	BD+ 1° 2541	K0	8.3	8.30	11 11 30.252	+3.0777	− .0013	− .0007	+ 1 0 35.92	−19.598	− .086	− .011	4	18.92
4667	BD+29° 2140	G5	*9.05*	8.1	11 31.645	3.2274	− .0186	+ .0005	+28 52 39.46	19.599	.091	− .031	4	18.42
4668	η Leonis	K0	5.48	5.03	11 40.862	3.1411	− .0082	− .0006	+13 44 38.91	19.601	.089	− .026	4	19.10
4669	BD+78° 381	F8	*8.60*	9.25	11 47.88	4.3553	− .2478	− .0013	+77 43 40.60	19.603	.124	+ .011	4	18.35
4670	BD+27° 2002	G5	*8.95*	9.3	11 59.833	3.2122	− .0169	− .0027	+26 39 15.89	19.607	.089	− .043	5	19.73
4671	237 B Urs Maj	K0	5.97	6.20	11 12 11.783	+3.4015	− .0430	− .0093	+49 54 47.46	−19.611	− .095	− .019	4	19.82
4672	BD+23° 2327	F8	*9.68*		12 33.882	3.1876	− .0140	− .003	+22 42 30.56	19.617	.087	− .03	5	20.16
4673	φ Leonis	A5	4.58	4.0	12 35.672	3.0573	+ .0008	− .0075	− 3 12 50.32	19.618	.084	− .044	4	18.24
4674	Wi (1) 11^{h} 148 *br.*	F0	6.03	6.1	12 54.836	3.0407	+ .0026	− .0014	− 6 41 53.02	19.624	.082	− .002	4	18.94
4675	CD−26° 8462	G5	7.24	7.49	12 56.816	2.9351	+ .0128	.0000	−26 48 8.29	19.624	.080	− .014	4	18.96
4676	BD+35° 2229	K0	*9.08*	8.7	11 12 59.565	+3.2653	− .0241	.000	+35 16 51.23	−19.625	− .089	.00	4	19.44
4677	BD+ 7° 2433		*9.64*		13 1.490	3.1066	− .0047	− .006	+ 7 6 21.30	19.626	.084	.00	4	19.22
4678	BD+17° 2337	G5	*8.56*	8.7	13 3.714	3.1578	− .0104	.000	+17 23 27.39	19.626	.085	− .01	4	18.53
4679	BD+63° 950		*9.75*		13 7.85	3.6045	− .0780	+ .016	+62 57 49.74	19.627	.098	− .04	4	19.93
4680	BD+31° 2249	F5	*9.50*		13 7.968	3.2393	− .0207	+ .002	+31 32 49.41	19.628	.088	.00	4	19.71

4621. 14^{m}, 4″.6, 243°.

4674. $12^{m}0$, 1″.3, 221°.

No.	Name	Sp.	Mag.	Obs. Mag	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4681	Brad 1552	K5	5.44	5.2	11 13 10.385	+3.0843	−0.0019	+0.0032	+ 2 27 2.43	−19.628	−0.083	−0.152	4	18.68
4682	CD−28° 8761		8.4		13 54.326	2.9249	+ .0140	− .0062	−28 58 5.90	19.641	.077	.000	4	19.21
4683	ξ Urs Maj. *n. pr.*	G0	4.41	5.20	13 54.988	3.2394	− .0211	− .0333	+31 58 46.57	19.641	.086	− .598	4	20.26
4684	BD+ 9° 2474		9.3		14 0.158	3.1152	− .0055	− .006	+ 9 3 55.44	19.643	.082	.00	4	18.96
4685	BD+46° 1713	G5	*9.03*	8.7	14 0.435	3.3516	− .0370	− .0123	+46 18 29.90	19.643	.089	− .226	4	19.44
4686	ν Urs Maj *br.*	K0	3.71	3.72	11 14 9.668	+3.2486	− .0223	− .0018	+33 31 51.57	−19.645	− .086	+ .015	14	21.89
4687	BD+76° 423	F0	*8.55*	8.38	14 10.20	4.1873	− .2132	+ .0009	+76 36 12.18	19.646	.113	+ .029	4	19.96
4688	BD+55° 1455	K5	*9.50*	9.3	14 29.707	3.4504	− .0530	− .006	+55 5 16.65	19.651	.091	+ .03	4	18.98
4689	BD− 8° 3132		10.2		14 43.435	3.0334	+ .0037	+ .002	− 8 30 51.36	19.655	.078	+ .03	4	18.87
4690	Brad 1555	A2	4.78	4.90	14 46.537	3.2820	− .0273	− .0049	+38 37 28.77	19.656	.086	− .084	4	19.74
4691	BD+15° 2321 *br.*	G0	6.97	6.8	11 14 48.556	+3.1415	− .0087	+ .0036	+14 42 34.21	−19.657	− .081	− .157	4	18.89
4692	BD+ 2° 2412		*9.21*	9.2	14 59.797	3.0825	− .0018	− .0006	+ 2 8 22.48	19.660	.079	− .009	4	19.48
4693	BD+56° 1514	G5	*9.68*		15 8.358	3.4676	− .0567	+ .003	+56 38 52.64	19.662	.090	+ .02	4	18.65
4694	BD+75° 440	G0	8.47	8.57	15 8.37	4.0332	− .1769	− .0258	+74 51 31.84	19.662	.106	− .014	4	19.51
4695	Wi (1) 11ʰ 193 *br.*	F8	6.80	7.09	15 18.482	3.0672	− .0001	− .0155	− 1 12 49.01	19.665	.079	− .157	4	18.68
4696	δ Crateris	K0	3.82	4.23	11 15 20.378	+3.0065	+ .0065	− .0085	−14 20 43.59	−19.665	− .077	+ .195	4	19.40
4697	BD+ 4° 2449	F8	*8.67*	8.76	15 37.310	3.0910	− .0027	− .0010	+ 4 3 33.84	19.671	.079	− .023	5	19.91
4698	BD−20° 3399	F5	8.5	8.6	15 48.238	2.9767	+ .0098	− .0045	−20 32 36.61	19.674	.074	− .045	5	18.76
4699	BD−10° 3246	K0	8.9	8.9	16 0.466	3.0247	+ .0048	− .0003	−10 39 28.39	19.677	.076	+ .026	4	18.26
4700	BD+43° 2105		*9.96*		16 9.099	3.3094	− .0322	− .001	+42 58 46.00	19.679	.084	.00	4	19.36
4701	BD+24° 2344	G5	*8.73*	8.91	11 16 22.058	+3.1856	− .0147	+ .0021	+24 3 17.32	−19.683	− .079	− .106	4 3	18.91 20.21
4702	BD− 2° 3325	A2	8.7	9.33	16 27.127	3.0619	+ .0007	− .0020	− 2 27 35.21	19.684	.076	− .010	4	19.38
4703	BD+20° 2587	F8	*9.46*	9.3	16 32.266	3.1630	− .0117	− .003	+19 43 24.61	19.686	.079	− .05	4	19.19
4704	BD+13° 2391	K0	*8.91*	8.44	16 54.766	3.1304	− .0076	− .0133	+12 59 50.21	19.692	.077	− .045	4	19.18
4705	BD−22° 3121	G0	8.1	7.75	16 55.170	2.9679	+ .0111	− .0177	−22 46 30.14	19.692	.075	− .138	4	18.68
4706	BD+28° 1993	K2	*9.29*	8.97	11 16 55.499	+3.2051	− .0174	+ .0017	+27 55 43.00	−19.692	− .079	+ .021	5	20.33
4707	σ Leonis	A0	4.13	4.22	17 0.711	3.1010	− .0039	− .0063	+ 6 28 4.64	19.693	.076	− .015	82 70	19.93 20.18
4708	BD+62° 1174		*9.32*	8.6	17 9.71	3.5339	− .0716	− .005	+61 41 50.45	19.696	.087	− .01	4	19.23
4709	BD− 3° 3098	A2	8.1	6.94	17 11.976	3.0557	+ .0016	− .0024	− 3 55 40.74	19.697	.075	+ .001	4	18.95
4710	BD+41° 2181	F8	7.10	7.30	17 13.488	3.2873	− .0295	+ .0037	+40 52 14.29	19.697	.081	− .059	4	19.14
4711	BD+32° 2139	Ma	*8.57*	7.8	11 17 18.309	+3.2303	− .0212	+ .002	+32 28 54.62	−19.698	− .079	.00	4	18.99
4712	BD−11° 3081	F8	7.7	7.77	17 30.006	3.0192	+ .0057	− .0098	−12 15 39.58	19.702	.073	+ .050	4	20.16
4713	BD+11° 2347		*9.72*		17 31.436	3.1204	− .0064	− .003	+10 57 51.80	19.702	.075	− .09	4	19.92
4714	BD+47° 1863		9.5		17 41.379	3.3390	− .0379	− .0205	+47 21 0.55	19.705	.081	− .177	4	19.72
4715	249 B Urs Maj	A0	5.98	5.69	18 6.93	3.5881	− .0839	− .0007	+64 46 6.43	19.711	.087	+ .036	4	19.69
4716	CD−24° 9706 *m.*	K2	9.6	8.1	11 18 8.378	+2.9629	+ .0120	− .0062	−24 20 17.78	−19.712	− .070	− .037	4	19.70
4717	BD+38° 2231	G5	*9.03*	8.77	18 28.666	3.2594	− .0261	− .002	+37 46 56.23	19.717	.078	+ .01	4	18.96
4718	BD+30° 2141	F8	*8.70*	9.50	18 53.444	3.2103	− .0190	+ .0017	+29 59 36.70	19.724	.075	+ .002	4	18.74
4719	BD+21° 2312	F8	9.2	8.8	19 2.358	3.1646	− .0125	− .005	+21 8 22.73	19.726	.074	+ .01	4	18.51
4720	BD−15° 3256	F5	8.1	7.96	19 4.799	3.0039	+ .0078	− .0023	−16 9 57.23	19.727	.069	.000	4	18.79
4721	BD−13° 3359	K2	8.3	8.3	11 19 6.504	+3.0125	+ .0068	+ .0002	−14 15 12.40	−19.727	− .069	+ .015	4	18.32
4722	BD+58° 1315	F8	*9.50*	9.3	19 17.014	3.4476	− .0586	+ .011	+57 47 24.44	19.730	.081	− .04	4	18.97
4723	BD−17° 3367	F2	5.15	5.2	19 23.819	2.9946	+ .0089	− .0219	−18 20 24.49	19.731	.069	− .040	4	19.11
4724	ι Leonis *br.*	F5	4.12	4.19	19 45.310	3.1180	− .0063	+ .0105	+10 58 12.64	19.737	.072	− .085	4	17.67
4725	CD−26° 8525	K2	7.53	7.06	19 56.381	2.9567	+ .0133	− .0054	−26 31 9.17	19.740	.066	+ .037	4	18.69
4726	BD+66° 719		*9.22*		11 20 13.89	+3.5833	− .0873	+ .0100	+65 40 59.97	−19.744	− .082	− .024	4	18.48
4727	BD+44° 2084	G5	*8.91*	9.32	20 44.380	3.2901	− .0325	− .002	+43 39 19.77	19.752	.073	+ .03	4	18.98
4728	BD− 5° 3276	F5	9.1	9.1	20 45.320	3.0475	+ .0029	− .002	− 6 19 40.23	19.752	.067	− .01	4	18.40
4729	BD+50° 1820	F8	8.07	7.67	20 51.553	3.3416	− .0414	− .004	+49 48 57.43	19.754	.074	− .05	4	19.33
4730	γ Crateris *br.*	A5	4.14	4.87	20 53.045	3.0023	+ .0084	− .0075	−17 14 40.24	19.754	.066	− .003	4	19.29
4731	BD− 7° 3231	K0	8.1	8.08	11 21 3.273	+3.0408	+ .0038	+ .001	− 8 2 10.20	−19.756	− .067	+ .01	4	18.13
4732	BD+35° 2250	G0	*8.78*	8.65	21 9.883	3.2341	− .0236	.000	+35 36 23.47	19.758	.072	− .02	4	19.13
4733	CD−27° 8075	A3	8.7		21 10.148	2.9517	+ .0143	.0000	−28 13 36.80	19.758	.064	− .026	4	18.67
4734	BD+79° 361		*9.45*		21 14.53	4.2908	− .2872	.0000	+79 32 20.22	19.759	.097	+ .030	4	19.51
4735	Brad 1565	F2	5.63	5.8	21 26.192	3.1407	− .0006	− .0089	+16 53 47.04	19.762	.068	− .023	4	19.19
4736	Oelt 11751 *br.*	F0	7.22	7.05	11 21 27.692	+3.3649	− .0462	+ .0011	+52 34 19.98	−19.762	− .074	− .025	4	19.18
4737	Lal 21737	A2	7.15	7.78	21 31.458	3.1871	− .0166	− .0025	+27 11 13.33	19.763	.069	+ .018	5	19.30
4738	BD+ 4° 2461	A2	6.70	6.83	21 32.068	3.0873	− .0022	− .0021	+ 3 44 30.97	19.764	.067	− .056	4	19.34
4739	BD+ 6° 2451	F2	8.7	8.57	21 34.962	3.0869	− .0035	+ .004	+ 6 11 17.87	19.764	.067	− .04	4	19.18
4740	Lac 4739	K0	5.34		21 36.505	2.9131	+ .0187	− .0101	35 37 25.00	19.765	.062	+ .007	4	18.61

4683 4m87, 2″9, 105°, 60 yrs.; for c. g. add +0s100, 0″33 (1920.2). p. m. is for c. g.
4686 10m, 7″4, 146°.
4691 5m1, 3″1, 19°.
4695 8m0, 9″5, 252°.
4716. 10m2-10m5, 0″5, 190°.
4724 6m79, 1″8, 40°.
4730 10m, 5″0, 96°.
4736. 14m, 4″4, 63°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4741	Wi (1) 11^{h} 321	K0	6.82	6.22	11 22 9.564	+3.1079	−0.0051	+0.0001	+9 6 0.17	−19.773	−0.066	−0.026	4	19.40
4742	BD+68° 643		*9.32*		22 30.22	3.6236	−.1017	+.0201	+68 26 28.36	19.777	.075	−.019	4	19.61
4743	Lal 21780	A0	6.79	7.04	22 34.708	2.9897	+.0105	−.0017	−20 54 58.71	19.778	.062	+.005	4	19.44
4744	83 Leonis *n. pr.*	K0	6.54	6.20	22 42.410	3.0858	−.0020	−.0482	+3 26 57.38	19.780	.064	+.173	4	19.65
4745	BD−9° 3287	A2	8.9	8.31	22 43.375	3.0347	+.0049	−.003	−9 57 44.19	19.781	.063	.00	4	19.50
4746	BD+22° 2362	G5	7.60	7.35	11 22 51.000	+3.1611	−.0131	−.0013	+22 17 46.40	−19.782	−.066	−.185	4	19.99
4747	BD+33° 2116	K0	7.9	7.27	22 55.309	3.2155	−.0217	+.003	+33 33 58.10	19.783	.067	−.07	4	19.73
4748	κ Crateris	F8	5.96	5.8	23 7.650	3.0275	+.0059	−.0072	−11 55 1.42	19.786	.062	+.013	4	18.49
4749	BD+70° 661	F0	*8.80*	8.62	23 12.47	3.6670	−.1141	−.0031	+70 13 52.39	19.787	.077	+.025	4	19.75
4750	BD+24° 2360	K0	9.26	9.3	23 19.868	3.1697	−.0145	−.0152	+24 29 2.39	19.789	.066	−.114	4	19.40
4751	BD+15° 2335		*9.09*	9.3	11 23 47.953	+3.1301	−.0086	+.004	+15 16 25.09	−19.796	−.064	.00	4	18.88
4752	τ Leonis	K0	5.18	4.89	23 49.397	3.0848	−.0018	+.0013	+3 17 49.20	19.796	.062	−.019	83 50	19.20 20.13
4753	BD+48° 1944	A0	8.2	8.5	23 49.562	3.3052	−.0378	−.004	+47 53 50.60	19.796	.067	−.02	4	18.77
4754	BD−1° 2527	F2	9.5	8.9	23 53.734	3.0673	+.0006	+.0014	−1 28 50.19	19.797	.062	−.014	4	19.47
4755	BD+37° 2181		8.8	9.17	23 54.087	3.2292	−.0244	−.002	+36 44 21.33	19.797	.065	+.01	4	19.14
4756	BD+58° 1320	F5	*9.77*		11 24 11.632	+3.4099	−.0586	−.006	+58 20 13.84	−19.801	−.069	.00	4	19.47
4757	BD+52° 1567		*10.02*		24 23.290	3.3369	−.0444	−.002	+51 56 32.89	19.804	.067	.00	4	19.55
4758	BD+20° 2608	K	*9.4*	9.1	24 43.733	3.1489	−.0116	−.001	+20 23 39.47	19.808	.062	.00	4	18.96
4759	BD+26° 2218	F0	*8.57*	8.91	24 46.427	3.1717	−.0153	−.0014	+25 49 13.79	19.809	.062	+.012	4	18.60
4760	BD−3° 3128 *br.*	F8	7.9	7.83	25 9.573	3.0585	+.0020	+.0014	−4 0 31.70	19.814	.059	−.079	4	19.09
4761	CD−24° 10004	G5	9.6		11 25 11.510	+2.9821	+.0124	−.0147	−24 8 10.90	−19.814	−.058	−.013	4	20.43
4762	BD−22° 3151	G0	9.8		25 21.294	2.9890	+.0116	−.0015	−22 35 11.52	19.817	.058	−.048	4	19.89
4763	BD−15° 3278	K5	10.0		25 30.981	3.0141	+.0083	−.0030	−16 18 59.50	19.819	.057	−.003	5	20.39
4764	BD+8° 2512	F5	6.72	6.72	25 32.064	3.1010	−.0043	−.002	+8 2 27.54	19.819	.059	−.01	4	18.95
4765	BD+11° 2360		*9.17*	9.4	25 32.887	3.1111	−.0059	−.003	+10 51 34.71	19.819	.060	−.03	4	18.24
4766	Lac 4758	K0	6.79	6.39	11 25 39.677	+2.9685	+.0142	−.0028	−27 35 22.42	−19.821	−.056	−.006	4	19.92
4767	Wi (2) 11^{h} 413	F0	6.78	6.7	25 50.254	3.1892	−.0187	−.0074	+30 24 36.94	19.823	.061	−.202	4	18.39
4768	BD+14° 2393		*8.85*	8.96	25 58.835	3.1240	−.0081	−.008	+14 33 7.07	19.825	.059	.00	4	18.24
4769	CD−25° 8711	K2	8.4	8.0	26 4.582	2.9761	+.0136	−.0030	−26 6 33.64	19.826	.055	+.012	4	19.12
4770	58 Urs Maj	F8	5.88	5.67	26 11.679	3.2598	−.0317	−.0048	+43 36 45.31	19.827	.062	+.071	4	18.54
4771	*e* Leonis	K2	5.07	4.81	11 26 13.596	+3,0639	+.0013	+.0013	−2 33 42.32	−19.828	−.057	−.017	4	18.11
4772	BD+57° 1326	F0	6.96	7.1	26 14.338	3.3773	−.0550	+.0021	+57 11 14.40	19.828	.064	+.042	4	19.14
4773	BD+84° 255		*9.32*		26 14.55	5.0892	−.7051	−.0034	+84 26 42.07	19.828	.100	+.011	4	18.99
4774	Grmb 1782	A0	6.13	6.49	26 15.42	4.3951	−.3711	−.0641	+81 34 3.85	19.828	.086	+.039	8	18.38
4775	BD+9° 2506	F2	8.02	7.7	26 16.806	3.1057	−.0051	−.002	+9 32 56.53	19.829	.058	+.04	4	18.61
4776	BD−13° 3379	G0	8.9	8.9	11 26 19.104	+3.0239	+.0072	−.0018	−14 1 8.48	−19.829	−.056	+.039	4	18.78
4777	BD−5° 3303	F8	9.3		26 26.578	3.0526	+.0030	−.001	−5 52 31.38	19.831	.057	−.04	4	19.19
4778	λ Draconis	Ma	4.06	4.9	26 40.40	3.5982	−.1078	−.0074	+69 46 22.23	19.834	.067	−.024	13	18.62
4779	BD+28° 2012	F8	*8.72*	8.6	26 58.996	3.1746	−.0168	−.0046	+27 58 39.36	19.838	.058	.000	4	18.47
4780	BD+40° 2436	K2	*8.18*	7.87	27 13.970	3.2355	−.0278	−.003	+40 32 18.03	19.841	.059	.00	6	20.91
4781	BD+18° 2505	A0	6.99	7.01	11 27 21.252	+3.1351	−.0101	−.001	+18 11 31.05	−19.842	−.057	−.03	4	18.08
4782	BD+79° 367	K0	*8.70*	9.19	28 4.73	4.0190	−.2442	−.0007	+78 54 27.87	19.851	.073	+.009	5	18.30
4783	BD+42° 2217	K0	*8.70*	8.73	28 16.939	3.2400	−.0298	−.002	+42 13 1.79	19.854	.056	−.03	4	18.43
4784	BD+69° 615	G5	8.39	8.42	28 21.55	3.5613	−.1039	+.0059	+69 22 57.84	19.854	.063	+.012	4	19.02
4785	BD+53° 1497	K0	*8.62*	8.26	28 32.736	3.3150	−.0454	+.006	+52 57 56.32	19.857	.058	−.02	4	18.45
4786	BD+34° 2230	K2	7.42	7.23	11 28 47.019	+3.1974	−.0219	−.001	+34 29 37.07	−19.860	−.055	.00	4	17.60
4787	BD+38° 2256		*9.59*		28 59.016	3.2165	−.0258	−.004	+38 33 48.88	19.862	.055	+.03	4	18.44
4788	ξ Hydræ	G5	3.72	3.42	29 3.862	2.9629	+.0169	−.0159	−31 24 53.59	19.863	.050	−.051	4	18.24
4789	BD+56° 1526	K0	*7.46*	7.80	29 10.296	3.3386	−.0515	−.005	+56 1 28.92	19.864	.057	−.01	4	19.19
4790	BD+1° 2580	K2	8.5	8.78	29 17.443	3.0766	−.0004	−.0014	+1 14 43.23	19.866	.052	−.021	4	18.49
4791	BD+4° 2492	A3	8.91	9.3	11 29 17.930	+3.0870	−.0023	−.0009	+4 34 34.77	−19.866	−.052	−.013	4	18.93
4792	BD+16° 2268		*9.61*		29 34.210	3.1239	−.0087	−.006	+16 8 5.60	19.869	.052	−.04	4	19.40
4793	BD−9° 3318		9.8		29 47.724	3.0422	+.0052	+.004	−9 50 55.08	19.871	.050	.00	4	19.18
4794	BD−17° 3413	K0	9.6	ft.	30 1.635	3.0149	+.0097	−.0025	−18 20 23.95	19.874	.049	+.033	4	18.69
4795	BD+23° 2361	A2	8.2	9.3	30 11.149	3.1475	−.0132	−.0026	+23 19 43.91	19.876	.052	−.019	4	18.33
4796	BD+67° 707	G5	*8.84*	8.9	11 30 12.51	+3.4755	−.0869	−.0025	+66 43 53.95	−19.876	−.057	+.010	4	19.24
4797	Brad 1582	F5	5.81	6.15	30 16.330	3.0833	−.0017	−.0123	+3 30 17.11	19.877	.049	−.111	4	18.23
4798	BD+32° 2162	A2	*8.46*	8.57	30 35.112	3.1821	−.0202	−.001	+32 36 43.14	19.880	.051	+.03	4	19.38
4799	BD+72° 539		*9.42*		30 45.55	3.6122	−.1270	−.0031	+72 30 22.27	19.882	.059	+.014	5 4	20.86 20.33
4800	BD−7° 3255	G5	9.1		30 47.252	3.0504	+.0040	−.002	−7 29 3.29	19.883	.048	+.01	4	19.43

4744. $7^{\mathrm{m}}58$, 29″, 150°.

4760. 14^{m}, 5″0, 352°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4801	BD− 1° 2541	Ma	8.1	8.33	11 30 47.467	+3.0674	+0.0011	−0.0018	− 1 47 16.92	−19.883	−0.048	−0.011	4	18.38
4802	Wi (2) 11ʰ 509	K0	6.44	6.58	30 53.469	3.1373	− .0116	− .0060	+20 53 2.04	19.884	.049	− .016	4	20.28
4803	Wi (1) 11ʰ 474	K0	6.58	6.4	30 54.157	3.0611	+ .0022	− .0035	− 3 55 5.03	19.884	.048	− .057	4	18.72
4804	BD+63° 971		*8.72*	8.7	30 57.87	3.4052	− .0708	+ .0044	+63 4 42.14	19.885	.054	− .010	4	20.54
4805	BD+49° 2071		9.0	9.3	30 59.527	3.2661	− .0381	− .003	+48 54 3.43	19.885	.051	− .02	4	18.96
4806	BD+54° 1451	A2	*8.58*	8.6	11 31 15.225	+3.3056	− .0474	+ .003	+54 19 57.15	−19.888	− .052	− .03	4	18.95
4807	BD+ 6° 2467		*9.86*	ft.	31 18.385	3.0899	− .0028	+ .003	+ 5 53 40.44	19.888	.048	+ .03	5	20.17
4808	Wi (1) 11ʰ 481	K0	6.69	6.64	31 23.185	3.1070	− .0060	+ .0036	+11 37 54.22	19.889	.048	− .039	4	19.44
4809	BD−13° 3407	R0	8.7	8.7	31 39.946	3.0309	+ .0076	+ .0004	−14 9 1.97	19.892	.046	+ .002	4	20.12
4810	BD+31° 2281	G5	*8.51*	8.03	31 52.934	3.1716	− .0189	− .0073	+31 9 45.16	19.895	.048	+ .062	4	19.15
4811	BD−21° 3339	F8	8.7	8.6	11 32 6.013	+3.0070	+ .0118	− .0035	−22 2 8.96	−19.897	− .045	+ .040	4	19.72
4812	BD+42° 2224		*9.68*		32 30.210	3.2187	− .0292	− .005	+42 23 22.21	19.901	.046	+ .01	4	19.27
4813	BD+21° 2333	G5	*9.84*	8.7	32 34.782	3.1355	− .0119	− .005	+21 30 6.91	19.902	.046	+ .04	4	19.12
4814	θ Crateris	B9	4.81	5.16	32 37.320	3.0465	+ .0052	− .0041	− 9 21 35.47	19.902	.044	+ .001	4	18.88
4815	BD−11° 3135	F5	9.3		32 38.215	3.0391	+ .0065	− .0021	−11 55 35.64	19.902	.044	+ .036	4	19.70
4816	Grmb 1803	K5	6.71	6.80	11 32 42.93	+3.8219	− .2083	+ .0016	+78 2 18.40	−19.903	− .058	+ .011	8	18.90
4817	υ Leonis	K0	4.47	4.56	32 51.143	3.0717	+ .0006	.0000	− 0 22 55.02	19.905	.044	+ .035	65 47	19.70 19.71
4818	BD−20° 3461	K0	7.93	7.8	32 54.307	3.0137	+ .0108	+ .0020	−20 31 24.60	19.905	.044	− .096	4	19.23
4819	CD−25° 8772	A3	10.1		32 58.560	2.9969	+ .0140	− .0005	−25 44 1.75	19.906	.043	− .002	5	20.90
4820	BD+25° 2396	F8	*8.90*	9.4	33 4.153	3.1472	− .0144	− .0030	+25 25 50.27	19.907	.045	− .011	4	18.89
4821	BD+ 4° 2503		*9.74*		11 33 20.076	+3.0837	− .0017	+ .0002	+ 4 3 44.56	−19.910	− .044	− .014	4	19.00
4822	BD+50° 1845 *m.*	F5	7.78	7.82	33 32.578	3.2578	− .0397	+ .002	+50 15 10.74	19.912	.046	− .04	4	19.21
4823	BD+14° 2414		*9.53*	9.1	34 1.463	3.1105	− .0072	+ .003	+14 2 31.66	19.917	.043	.00	4	18.45
4824	BD+39° 2458	A0	8.2	8.5	34 4.520	3.1957	− .0258	+ .001	+39 11 51.03	19.917	.044	+ .02	4	18.45
4825	60 Urs Maj	F2	6.25	6.10	34 16.126	3.2348	− .0352	− .0056	+47 16 41.15	19.919	.047	− .026	4	17.91
4826	BD+29° 2191	K0	*9.61*		11 34 22.024	+3.1552	− .0169	− .0041	+28 56 0.37	−19.920	− .043	+ .005	4	19.44
4827	BD+30° 2180		*8.60*	8.8	34 24.507	3.1594	− .0179	− .0018	+30 11 58.75	19.920	.043	− .020	4	18.81
4828	BD+35° 2268		*9.72*	9.5	34 28.882	3.1774	− .0220	− .009	+35 10 35.28	19.921	.043	+ .05	4	19.24
4829	BD+17° 2381	K0	*8.64*	8.44	34 43.440	3.1192	− .0093	− .0090	+17 32 43.76	19.924	.041	− .041	4	19.19
4830	BD+24° 2375	F5	*9.01*	8.75	34 44.806	3.1389	− .0135	− .0038	+24 14 57.12	19.924	.041	− .022	4	18.72
4831	BD+75° 455	K0	8.17	8.3	11 34 49.52	+3.6380	− .1565	+ .0066	+75 28 21.70	−19.924	− .050	+ .018	4	19.19
4832	BD− 5° 3322	A2	8.9	9.5	34 53.824	3.0578	+ .0034	− .002	− 5 50 5.87	19.925	.040	+ .01	4	18.96
4833	BD+73° 531	A0	*9.05*	9.2	34 58.31	3.5489	− .1268	− .0050	+72 59 34.94	19.926	.048	+ .012	4	19.74
4834	CD−23° 10097	K2	9.3	7.79	35 2.383	3.0085	+ .0130	− .0020	−23 51 44.16	19.926	.039	− .005	5	18.93
4835	BD+45° 1961	G5	*8.20*	8.00	35 28.036	3.2153	− .0320	+ .0005	+44 57 45.29	19.930	.042	− .006	4	18.88
4836	Lal 22104	Ma	6.48	6.28	11 35 47.579	+3.0318	+ .0089	− .0013	−16 10 36.01	−19.933	− .038	+ .003	4	18.55
4837	BD+37° 2205	K0	*7.98*	8.55	36 0.802	3.1775	− .0233	− .001	+36 55 8.64	19.936	.040	.00	4	18.24
4838	BD+26° 2243	K0	8.05	8.11	36 1.312	3.1426	− .0151	+ .0018	+26 35 50.82	19.936	.040	+ .018	4	18.45
4839	BD+64° 859		*9.10*		36 11.28	3.3549	− .0712	+ .0051	+63 50 25.06	19.937	.042	− .008	4	19.51
4840	ο Hydræ	B8	4.88		36 14.163	2.9784	+ .0196	− .0024	−34 18 4.52	19.937	.036	+ .001	4	19.53
4841	CD−27° 8237	Ma	7.24	7.43	11 36 16.438	+2.9991	+ .0157	− .0021	−28 3 9.87	−19.938	− .036	− .037	4	18.93
4842	BD+ 1° 2597 *m.*	A3	6.83	6.98	36 17.947	3.0761	− .0002	− .0003	+ 1 23 44.33	19.938	.037	− .011	4	18.77
4843	BD+ 5° 2525	F5	7.8	7.34	36 22.361	3.0862	− .0025	.000	+ 5 35 0.24	19.939	.038	.00	4	19.22
4844	BD−17° 3439	F5	8.5	8.7	36 26.056	3.0285	+ .0098	+ .0001	−17 44 3.09	19.939	.037	− .048	4	19.21
4845	BD+60° 1339	F0	7.79	7.81	36 28.90	3.3155	− .0605	+ .002	+60 32 59.04	19.939	.041	.00	6	20.34
4846	Lal 22115	G0	7.42	7.2	11 36 32.234	+3.0536	+ .0047	− .0013	− 7 57 43.11	−19.940	− .037	− .027	4	18.33
4847	BD+ 9° 2530	A2	8.3	7.22	36 34.304	3.0946	− .0044	− .004	+ 9 6 57.75	19.941	.038	+ .01	4	18.69
4848	61 Urs Maj	G5	5.46	5.60	36 50.444	3.1659	− .0213	− .0007	+34 39 13.47	19.943	.038	− .390	4	18.39
4849	BD− 9° 3344		10.0		37 2.874	3.0500	+ .0056	+ .001	− 9 39 58.22	19.945	.036	− .01	4	18.75
4850	CD−29° 9274	F8	9.3	8.4	37 7.655	2.9963	+ .0168	− .0017	−29 50 21.22	19.945	.035	− .003	4	18.84
4851	BD+20° 2641	K0	*8.78*	8.71	11 37 25.260	+3.1205	− .0106	.000	+19 58 28.43	−19.948	− .036	− .01	4	18.39
4852	BD+12° 2366		*9.31*		37 40.704	3.1013	− .0060	− .012	+12 24 24.84	19.950	.036	+ .03	4	18.15
4853	BD+15° 2365		*9.42*	9.16	37 48.030	3.1073	− .0076	− .002	+14 58 34.75	19.951	.035	− .01	4	18.76
4854	BD+ 7° 2471		10.0		37 49.919	3.0891	− .0032	+ .001	+ 7 15 10.77	19.951	.035	− .12	4	18.64
4855	BD+22° 2394	K0	*9.54*		37 53.419	3.1250	− .0119	− .001	+22 6 55.89	19.952	.035	− .01	4	18.29
4856	3 Draconis	K0	5.48	4.8	11 38 1.46	+3.3769	− .0842	− .0077	+67 11 15.72	−19.953	− .039	+ .036	12	18.80
4857	BD−21° 3361	F2	9.2		38 16.974	3.0231	+ .0119	− .0002	−21 24 32.29	19.955	.033	− .010	4	18.98
4858	BD+33° 2145	F2	*8.35*	8.3	38 35.061	3.1542	− .0200	− .0015	+33 10 13.35	19.958	.035	− .024	4	18.17
4859	BD+52° 1582	F8	*8.80*	8.83	38 41.855	3.2332	− .0420	+ .002	+52 22 13.21	19.960	.035	+ .02	4	17.82
4860	BD+57° 1336	G0	*8.74*	9.3	39 8.712	3.2625	− .0517	+ .003	+57 23 19.83	19.962	.035	+ .01	4	18.48

4822. $8^{m}2$-$9^{m}1$, $0''3$, 105°.

4842. $6^{m}9$-$11^{m}6$, $0''9$, 110°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4861	BD−19° 3329	K5	7.12	7.25	11 39 20.280	+3.0304	+0.0108	−0.0020	−19 22 43.96	−19.964	−0.033	−0.032	4	17.96
4862	BD+42° 2241	G5	6.81	6.62	39 23.379	3.1814	− .0282	+ .0021	+42 9 59.78	19.964	.033	− .021	6	20.71
4863	BD+17° 2392	G0	*7.95*	7.64	39 40.083	3.1084	− .0085	− .0081	+16 45 59.32	19.966	.032	+ .048	4	18.11
4864	BD+47° 1898		*10.09*		39 43.095	3.2023	− .0347	.000	+47 38 15.72	19.967	.033	+ .03	4	18.50
4865	BD− 0° 2479	Ma	8.5	8.54	40 30.304	3.0708	+ .0012	− .0004	− 0 56 26.99	19.973	.030	+ .005	4	17.90
4866	BD+70° 674	A2	7.62	7.70	11 40 32.91	+3.3904	− .1001	− .0075	+70 22 32.43	− 19.973	− .033	− .019	4	18.35
4867	BD−10° 3332		9.6		40 41.547	3.0508	+ .0065	− .0091	−11 1 34.34	19.974	.029	− .044	4	18.71
4868	BD+80° 363	F8	*9.20*	9.2	40 41.61	3.7409	− .2529	− .0148	+80 26 52.64	19.974	.037	− .012	4	18.73
4869	ζ Crateris	G5	4.90	4.89	40 42.337	3.0364	+ .0102	+ .0024	−17 54 21.05	19.974	.028	− .039	4	17.90
4870	BD−12° 3482	G0	9.3		40 45.071	3.0460	+ .0077	− .0038	−13 16 17.06	19.975	.029	+ .016	4	17.99
4871	BD+ 3° 2545	K5	8.7	8.83	11 40 55.098	+3.0781	− .0007	− .0019	+ 2 47 52.27	−19.976	− .029	− .022	4	17.63
4872	Wi (2) 11ʰ 750	Mb	7.23	7.03	41 23.760	3.1524	− .0223	− .0043	+36 20 16.73	19.979	.029	+ .005	5	17.64
4873	ν Virginis	Ma	4.20	4.0	41 44.850	3.0857	− .0029	− .0012	+ 6 58 39.91	19.982	.028	− .187	4	18.92
4874	χ Urs Maj	K0	3.85	3.7	41 49.949	3.1912	− .0351	− .0136	+48 13 22.80	19.982	.027	+ .016	4	17.99
4875	BD+13° 2452		*9.49*		41 59.565	3.0977	− .0064	+ .003	+13 25 26.33	19.983	.028	− .05	4	17.89
4876	BD+79° 374		*9.20*	8.8	11 42 20.33	+3.6100	− .2090	− .0021	+79 9 39.50	−19.986	− .032	+ .021	4	18.65
4877	CD−23° 10162	Ma	7.46	6.73	42 26.743	3.0271	+ .0138	− .0021	−24 2 23.39	19.986	.025	.000	4	19.08
4878	BD− 2° 3411	F2	7.50	7.7	42 35.108	3.0669	+ .0025	+ .0012	− 3 17 49.26	19.987	.026	− .051	4	18.10
4879	Grmb 1825	K0	5.41	5.4	42 39.158	3.2229	− .0477	+ .0019	+56 4 23.93	19.988	.027	− .040	4	18.13
4880	Grmb 1826	F0	6.64	6.88	42 49.35	3.2597	− .0616	− .0056	+61 50 49.70	19.989	.027	− .036	4 5	18.71 17.81
4881	BD+20° 2648	A2	8.05	8.40	11 43 2.958	+3.1082	− .0101	.000	+19 45 2.21	−19.990	− .027	.00	4	18.40
4882	BD+27° 2057	K5	*9.19*		43 19.554	3.1219	− .0147	− .0045	+26 51 29.85	19.992	.027	− .054	4	18.52
4883	CD−25° 8867	K0	8.7	8.5	43 39.856	3.0273	+ .0148	− .0018	−25 31 49.73	19.994	.023	+ .015	4	19.95
4884	BD+ 0° 2839	K5	*9.21*		43 40.843	3.0729	+ .0009	− .0008	+ 0 6 45.84	19.994	.023	− .021	4	19.17
4885	Brad 1602	A0	5.22	6.1	43 48.350	3.0871	− .0036	− .0034	+ 8 41 24.68	19.995	.023	+ .001	4	18.92
4886	BD−14° 3406 *m.*	F5	8.3	7.43	11 43 48.930	+3.0474	+ .0088	+ .0026	−15 1 2.20	−19.995	− .023	− .006	4	19.22
4887	BD+41° 2232	K0	*9.01*	8.8	43 50.871	3.1549	− .0264	− .003	+41 7 10.87	19.995	.024	+ .02	4	18.98
4888	93 Leonis	F8	4.54	4.78	43 51.632	3.1082	− .0106	− .0110	+20 39 49.30	19.996	.023	− .020	4	18.69
4889	BD+10° 2338		*9.85*		44 9.821	3.0897	− .0046	− .002	+10 25 45.96	19.997	.023	− .03	4	18.87
4890	Wi (2) 11ʰ 799	F2	7.21	7.30	44 16.432	3.1232	− .0160	− .0068	+28 51 42.96	19.998	.022	− .030	4	18.81
4891	BD+54° 1467	G	*9.98*		11 44 23.270	+3.1964	− .0428	− .003	+53 39 56.17	−19.999	− .023	− .02	5	20.58
4892	β Leonis	A2	2.23	2.72	44 58.786	3.0962	− .0071	− .0342	+15 1 9.64	20.002	.021	− .123	99 38	20.69 20.26
4893	BD+45° 1963	G5	*9.21*	9.2	45 12.396	3.1595	− .0307	+ .0019	+45 11 7.18	20.003	.021	− .017	4	18.73
4894	BD+70° 677	G0	*9.07*	9.4	45 33.26	3.3102	− .0963	− .0156	+70 29 17.83	20.005	.022	+ .033	4	18.84
4895	BD− 6° 3458	K0	8.9	8.87	45 47.943	3.0623	+ .0047	− .002	− 7 8 36.84	20.007	.019	+ .04	4	18.63
4896	BD+18° 2531	K0	*9.75*		11 45 47.969	+3.0994	− .0087	.000	+17 50 56.99	−20.007	− .019	+ .02	4	18.71
4897	BD+44° 2132	G5	*7.89*	8.02	46 25.002	3.1494	− .0292	+ .0028	+44 6 14.70	20.010	.019	− .023	4	18.18
4898	BD−16° 3337	F8	8.3	7.92	46 25.666	3.0481	+ .0102	− .0088	−17 17 45.60	20.010	.018	+ .001	4	18.89
4899	β Virginis	F8	3.80	3.80	46 31.660	3.0757	.0000	+ .0495	+ 2 12 56.32	20.010	.017	− .279	71 56	19.81 19.89
4900	Lac 4905	K0	6.53	5.99	46 34.501	3.0331	+ .0158	− .0060	−26 49 59.84	20.011	.018	+ .014	4	18.91
4901	BD+71° 588	K0	*8.62*	8.32	11 46 43.59	+3.3046	− .1018	+ .0015	+71 33 18.21	−20.011	− .019	+ .006	4	18.76
4902	BD+23° 2396	K0	*9.04*	8.6	46 56.244	3.1053	− .0119	− .002	+23 11 18.11	20.013	.017	− .02	4	18.88
4903	Pi 11ʰ 167	K0	5.81	5.42	46 56.806	3.0662	+ .0036	+ .0004	− 4 53 18.24	20.013	.017	− .012	4	19.38
4904	BD− 8° 3249	F0	7.52	7.88	46 57.483	3.0609	+ .0057	− .004	− 8 49 43.17	20.013	.017	+ .01	4	19.42
4905	BD−12° 3507	K2	8.5	8.09	46 58.434	3.0548	+ .0080	− .0030	−13 14 52.97	20.013	.017	− .005	4	19.63
4906	BD+33° 2161	F8	*8.32*	8.60	11 47 0.220	+3.1218	− .0188	− .006	+32 55 27.36	−20.013	− .017	+ .02	4	19.15
4907	Rad (90) 3077	F0	6.22	6.4	47 18.343	3.0573	+ .0073	− .0135	−11 44 38.24	20.014	.017	+ .028	4	19.54
4908	BD+37° 2222	G5	*8.82*	8.8	47 25.535	3.1280	− .0221	− .0067	+37 1 58.31	20.015	.016	− .046	4	18.74
4909	Lal 22372	F5	7.49	7.50	47 29.024	3.0444	+ .0125	− .0002	−21 11 27.17	20.015	.016	+ .010	4	19.49
4910	BD+68° 664	A2	*8.86*	8.77	47 36.14	3.2543	− .0828	+ .0025	+68 18 4.52	20.016	.017	− .009	4	18.73
4911	Lac 4913	G0	5.96	6.68	11 47 38.642	+3.0305	+ .0182	− .0022	−30 22 59.90	−20.016	− .016	− .309	4	19.78
4912	BD+30° 2199		*9.97*		48 0.644	3.1134	− .0166	.000	+30 13 29.02	20.018	.015	+ .03	4	18.75
4913	Oelt 12130	K2	7.07	7.28	48 3.285	3.1568	− .0369	− .0045	+50 22 33.57	20.018	.016	+ .026	4	19.91
4914	BD+ 6° 2518	K0	8.7	9.15	48 3.625	3.0801	− .0020	.000	+ 6 4 16.07	20.018	.015	+ .05	4	19.32
4915	BD+59° 1406		*8.72*		48 8.853	3.1869	− .0519	− .003	+58 49 27.96	20.018	.016	.00	4	19.53
4916	BD−19° 3360 *m.*	G5	8.6		11 48 15.900	+3.0485	+ .0116	− .0021	−19 31 39.93	−20.019	− .014	+ .049	4	19.03
4917	BD+77° 447		*9.12*		48 21.98	3.3769	− .1592	+ .0021	+77 26 2.54	20.019	.016	+ .035	5 4	19.42 19.96
4918	Grmb 1830	G5	6.46	6.47	48 22.198	3.1262	− .0233	+ .3396	+38 17 36.72	20.019	.014	−5.807	4	19.53
4919	BD+43° 2162		*9.47*	9.4	48 31.738	3.1348	− .0276	− .002	+42 52 19.54	20.020	.014	+ .03	4	19.12
4920	BD+29° 2225	F5	*8.65*	8.40	48 37.278	3.1093	− .0156	− .0018	+28 51 13.07	20.020	.013	.000	4	18.85

4886. $8^{m}9$–$8^{m}9$, 0″3, 51°.

4916. $9^{m}2$–$9^{m}4$, 0″4, 194°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4921	Pi 11h 170	A2	6.73	6.9	11 48 38.902	+3.0915	−0.0073	+0.0027	+15 52 58.07	−20.021	−0.015	−0.064	4	18.78
4922	BD+47° 1909	G5	8.6	8.30	48 48.659	3.1426	− .0323	+ .001	+47 0 13.14	20.021	.014	− .03	4	19.84
4923	BD− 0° 2501	F8	9.3		48 51.235	3.0718	+ .0016	− .0061	− 0 49 35.05	20.021	.013	+ .028	4	19.02
4924	β Hydræ *m.*	B9	4.40		48 51.810	3.0298	+ .0204	− .0045	−33 27 46.72	20.021	.013	− .006	4	19.46
4925	BD+ 4° 2536 *br.*	G0	*9.86*		49 18.482	3.0772	− .0010	− .0016	+ 4 6 37.33	20.023	.014	− .027	5	18.53
4926	CD−23° 10252	K0	9.6		11 49 32.177	+3.0462	+ .0139	.0000	−23 27 51.86	−20.024	− .014	+ .010	4	18.46
4927	γ Urs Maj.	A0	2.54	3.43	49 37.767	3.1563	− .0422	+ .0107	+54 8 22.77	20.025	.012	+ .003	5	19.12
4928	BD+11° 2409	K0	*8.62*	8.52	49 46.973	3.0849	− .0049	− .001	+11 33 52.59	20.025	.012	+ .03	4	19.04
4929	BD+18° 2539	F8	7.76	8.1	50 0.681	3.0923	− .0089	− .003	+18 36 54.85	20.026	.011	− .02	4	17.66
4930	BD−15° 3377	G5	9.8		50 13.462	3.0568	+ .0096	− .0030	−15 35 10.51	20.027	.010	− .002	4	19.70
4931	BD+38° 2289		*9.23*		11 50 15.889	+3.1178	− .0231	− .002	+38 28 58.58	−20.027	− .010	+ .01	4	18.12
4932	CD−28° 9154	A3	9.9		50 18.454	3.0415	+ .0174	− .0034	−28 55 46.54	20.027	.010	+ .021	5 4	20.48 21.58
4933	BD+74° 477	F2	*8.70*	8.9	50 21.89	3.2715	− .1182	− .0122	+74 13 40.01	20.027	.011	+ .013	4	19.18
4934	BD+55° 1496	G5	8.81	9.1	50 28.663	3.1510	− .0430	− .002	+54 40 54.91	20.028	.010	− .13	4	19.21
4935	CD−25° 8930	G5	5.50	5.2	50 37.990	3.0469	+ .0152	+ .0032	−25 16 14.28	20.028	.010	+ .067	4	17.64
4936	BD+21° 2374	K7	*9.66*		11 50 39.200	+3.0941	− .0106	− .002	+21 27 57.63	−20.028	− .011	.00	4	18.70
4937	BD− 2° 3438	F8	8.5	8.1	51 10.414	3.0700	+ .0029	− .0025	− 2 59 52.84	20.030	.009	− .037	4	18.18
4938	BD+ 0° 2859		*9.84*		51 33.042	3.0730	+ .0012	− .0012	+ 0 22 4.13	20.032	.008	+ .047	4	17.67
4939	o Leonis	A2	5.49	5.93	51 33.698	3.0869	− .0073	+ .0017	+16 5 31.35	20.032	.008	− .007	4	18.61
4940	BD+70° 678		*9.55*		51 46.03	3.2023	− .0859	.0000	+69 40 13.86	20.032	.008	+ .014	4	19.20
4941	CD−26° 8863	K0	9.4		11 51 48.860	+3.0484	+ .0164	− .0030	−27 0 59.86	−20.032	− .007	− .002	4	18.67
4942	BD+26° 2271	G0	9.0	8.90	51 53.584	3.0957	− .0133	+ .0036	+25 56 15.59	20.033	.007	− .141	4	18.42
4943	η Crateris	A0	5.16	5.36	51 56.175	3.0586	+ .0103	− .0033	−16 42 19.33	20.033	.007	− .019	4	18.85
4944	BD+61° 1272		*9.58*		51 58.54	3.1575	− .0557	− .009	+61 7 13.99	20.033	.008	− .01	5	19.98
4945	BD− 6° 3479		9.6		52 9.217	3.0673	+ .0049	+ .001	− 6 41 37.07	20.033	.007	+ .03	4	19.22
4946	BD+36° 2225 *br.*	F2	6.72	6.68	11 52 9.967	+3.1058	− .0207	− .0071	+35 53 35.66	−20.033	− .007	− .002	6	20.46
4947	BD+46° 1761	G0	*9.81*		52 26.181	3.1189	− .0308	− .001	+46 18 18.69	20.034	.006	− .08	4	18.76
4948	BD+51° 1714	K5	*8.85*		52 35.444	3.1262	− .0369	− .003	+51 3 23.81	20.035	.006	− .01	4	18.97
4949	BD−18° 3277	K2	8.7		52 35.662	3.0576	+ .0118	− .0062	−19 20 31.63	20.035	.006	− .039	4	18.90
4950	Grmb 1841	F5	6.54	6.5	53 7.914	3.1073	− .0256	− .0155	+40 47 25.37	20.036	.005	− .065	4	18.98
4951	BD+44° 2144	K0	*9.19*	8.6	11 53 8.252	+3.1111	− .0279	+ .0025	+43 48 36.86	−20.036	− .005	− .010	4	19.43
4952	BD+27° 2073	K0	7.44	7.20	53 18.622	3.0928	− .0141	+ .0001	+27 12 38.94	20.037	.005	− .143	4	18.70
4953	BD+ 8° 2551		*9.71*		53 31.388	3.0780	− .0029	− .002	+ 7 59 4.22	20.037	.004	− .03	4	18.78
4954	BD+73° 541	F2	*8.72*	8.50	53 33.21	3.1991	− .1073	− .0070	+73 26 42.42	20.037	.005	+ .012	4	18.84
4955	BD+10° 2362	G5	*8.97*	8.92	53 38.370	3.0796	− .0041	− .009	+10 34 10.40	20.037	.004	− .03	4	18.84
4956	BD+67° 725	A2	*8.52*	8.5	11 53 40.69	+3.1618	− .0748	+ .0033	+67 31 31.39	−20.038	− .004	− .043	4	18.82
4957	BD+ 9° 2565	K0	7.9	7.64	53 42.785	3.0788	− .0035	− .008	+ 9 26 5.10	20.038	.004	+ .03	4	19.16
4958	BD−20° 3545	K2	8.6	8.5	53 50.728	3.0590	+ .0127	− .0089	−20 52 51.85	20.038	.003	− .023	4	19.53
4959	BD+14° 2457	G5	8.29	8.33	53 55.021	3.0819	− .0063	− .006	+14 28 54.21	20.038	.003	+ .08	4	19.02
4960	W1 (2) 11h 991 *br.*	F0	6.30	6.55	54 0.809	3.0951	− .0180	− .0095	+32 43 14.16	20.038	.003	− .067	4	19.41
4961	BD+55° 1500	K0	*8.32*	7.86	11 54 33.221	+3.1179	− .0422	− .001	+54 55 53.83	−20.040	− .002	− .02	4	19.52
4962	BD+16° 2323		*8.82*	9.1	54 49.004	3.0812	− .0069	− .002	+15 42 41.11	20.040	.001	.00	4	19.27
4963	BD− 8° 3267	K5	8.7	8.08	54 49.697	3.0680	+ .0061	− .001	− 8 52 5.23	20.040	.001	.00	4	19.02
4964	BD+24° 2416	K0	*8.94*	8.6	54 59.586	3.0859	− .0121	− .0012	+24 21 6.76	20.040	.001	− .033	4	18.93
4965	BD+62° 1208		*8.97*	9.4	55 16.13	3.1248	− .0567	− .004	+62 4 45.36	20.041	.001	+ .01	4	17.69
4966	CD−29° 9468	K5	6.97	6.4	11 55 17.184	+3.0571	+ .0184	− .0040	−29 36 55.10	−20.041	− .001	.000	4	19.67
4967	BD+38° 2295		*9.62*		55 35.524	3.0929	− .0221	− .001	+38 8 35.49	20.041	.000	.00	4	18.93
4968	BD+34° 2278		9.6		55 41.199	3.0899	− .0190	+ .002	+34 24 22.70	20.042	.000	+ .01	4	18.83
4969	b Virginis	A0	5.24	6.2	55 51.028	3.0744	− .0006	− .0011	+ 4 6 2.40	20.042	+ .001	− .018	4	19.60
4970	Lal 22573	Mb	7.06	6.65	55 59.000	3.0812	− .0092	− .0079	+19 51 55.83	20.042	.001	− .031	4	18.87
4971	BD+18° 2567	K	8.7	8.89	11 55 59.584	+3.0805	− .0083	− .002	+18 21 56.91	−20.042	+ .001	.00	4	18.90
4972	BD+ 6° 2536	G5	8.5	8.94	56 10.053	3.0750	− .0014	− .022	+ 5 48 42.53	20.042	.001	− .12	4	18.81
4973	BD+49° 2102		*9.70*		56 19.280	3.0979	− .0340	.000	+49 37 2.82	20.043	.001	+ .01	4	18.88
4974	BD+50° 1881	G0	*8.66*	9.10	56 20.376	3.0982	− .0345	− .0085	+50 1 45.94	20.043	.002	+ .050	5	19.81
4975	BD− 4° 3181	F0	8.9	8.8	56 32.504	3.0711	+ .0040	− .0020	− 4 40 30.01	20.043	.002	− .014	4	18.19
4976	BD− 2° 3449	F8	9.1	9.3	11 56 36.126	+3.0719	+ .0029	.0000	− 2 29 8.10	−20.043	+ .003	− .001	4	19.73
4977	Pulk (55) 1811	G5	5.63	5.75	56 38.012	3.0692	+ .0060	+ .0074	− 9 59 23.83	20.043	.003	− .479	4	18.17
4978	π Virginis	A3	4.57	4.77	56 46.412	3.0750	− .0020	− .0063	+ 7 3 37.38	20.043	.003	− .033	96 85	19.99 20.16
4979	BD+ 2° 2505	G0	8.9	8.8	56 53.777	3.0734	+ .0004	− .0049	+ 2 19 2.40	20.043	.003	+ .073	4	18.90
4980	BD− 0° 2520	K0	6.45	6.79	56 55.951	3.0723	+ .0024	− .0010	− 1 19 15.95	20.043	.003	.076	4	18.31

4924. $5^{m}0$–$5^{m}4$, 1″4, 354°.   4925. $11^{m}4$, 3″4, 160°.   4946. $8^{m}6$, 1″5, 131°.   4960. 13^{m}, 7″5, 231°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
4981	BD−22° 3261		10.2	ft.	11 56 58.224	+3.0651	+0.0144	−0.0010	−23 11 22.88	−20.043	+0.003	−0.020	4 5	19.33 19.14
4982	Wi (2) 11^{h} 926	A0	6.93	6.86	57 7.969	3.0765	− .0051	− .0029	+12 49 23.16	20.044	.003	+ .006	5	19.79
4983	BD−14° 3448		10.0		57 19.366	3.0685	+ .0098	− .0001	−15 4 54.48	20.044	.003	− .004	4	19.45
4984	Oelt 12261	A3	7.25	6.99	57 31.55	3.1042	− .0648	− .0101	+65 23 7.09	20.044	.004	− .045	4	18.95
4985	BD+40° 2490	G5	*8.52*	8.03	57 34.629	3.0846	− .0235	+ .0041	+40 2 0.85	20.044	.004	− .096	4	18.48
4986	BD+14° 2467	G5	*8.67*	9.3	11 57 38.878	+3.0761	− .0056	− .003	+13 51 21.67	−20.044	+ .003	.00	4	18.35
4987	BD+31° 2323	G	*9.12*	9.22	57 39.628	3.0810	− .0165	− .0027	+31 20 39.95	20.044	.004	+ .003	4	18.19
4988	CD−24° 10099	A3	9.7		57 40.111	3.0665	+ .0154	− .0032	−24 37 8.38	20.044	.003	+ .009	4	19.46
4989	BD−12° 3550	G5	9.2		58 4.696	3.0701	+ .0087	− .0009	−12 58 49.00	20.044	.005	− .007	4	19.20
4990	BD+63° 994		*9.20*	8.6	59 5.93	3.0830	− .0570	− .009	+62 56 47.17	20.045	.007	+ .02	4	18.30
4991	BD+29° 2251	K2	8.46	8.33	11 59 12.872	+3.0753	− .0152	+ .0007	+29 33 59.04	−20.045	+ .006	− .030	4	18.01
4992	BD−16° 3380	K0	8.7	8.8	59 13.674	3.0713	+ .0109	+ .002	−16 50 38.04	20.045	.007	− .04	4	18.29
4993	BD+56° 1560	F5	*9.97*		59 40.676	3.0755	− .0425	+ .002	+55 57 56.46	20.045	.008	+ .03	4	18.01
4994	BD− 6° 3501		9.2		59 47.197	3.0726	+ .0052	.000	− 6 28 59.88	20.045	.005	+ .02	4	18.73
4995	BD+45° 1990	G0	*9.37*	9.33	59 47.340	3.0740	− .0283	+ .0001	+45 18 18.24	20.045	.009	− .023	4	18.67
4996	BD−18° 3310	K0	10.2		11 59 58.430	+3.0727	+ .0119	− .0010	−18 41 1.09	−20.045	+ .009	− .001	4	19.15
4997	BD+77° 458	G5	*9.00*	9.4	12 0 0.69	3.0724	− .1253	+ .0113	+76 47 16.14	20.045	.008	− .053	4	18.08
4998	BD+ 1° 2647	G5	9.3		0 33.652	3.0726	+ .0012	− .0014	+ 1 12 16.78	20.045	.010	+ .002	4	18.78
4999	Grmb 1850	F5	6.38	7.05	0 43.01	3.012	− .412	− .057	+86 1 49.56	20.045	.010	+ .088	9	18.81
5000	BD+20° 2678	G5	9.2		1 3.304	3.0705	− .0089	− .022	+20 0 2.32	20.045	.011	− .06	4	18.86
5001	ο Virginis	G5	4.24	4.19	12 1 8.045	+3.0716	− .0029	− .0147	+ 9 10 38.40	−20.045	+ .011	+ .038	106 93	19.88 19.99
5002	Grmb 1852	K0	5.96	6.1	1 12.26	3.0414	− .1286	+ .0438	+77 21 11.03	20.045	.011	− .089	4	20.20
5003	BD− 0° 2534	K0	8.9	8.7	1 22.825	3.0728	+ .0023	− .0090	− 0 31 34.05	20.045	.011	− .002	4	18.21
5004	BD+16° 2336		*9.73*		1 32.033	3.0702	− .0065	− .003	+15 54 12.65	20.045	.012	+ .03	4	19.03
5005	BD+54° 1489	K0	*7.82*	8.25	1 42.322	3.0591	− .0386	− .008	+53 55 45.20	20.045	.012	.00	4	18.49
5006	Cape (80) 6743	B9	6.26		12 1 49.646	+3.0802	+ .0232	− .0038	−35 14 54.44	−20.045	+ .012	− .006	4	20.27
5007	CD−27° 8494	G0	9.3		2 3.170	3.0789	+ .0176	− .0020	−27 31 36.01	20.044	.013	− .026	4	19.50
5008	Oelt 12335	F5	7.77	7.43	2 3.270	3.0586	− .0327	− .0128	+49 36 13.15	20.044	.013	+ .010	4	19.72
5009	BD+47° 1926	K5	7.55	7.32	2 15.937	3.0587	− .0294	− .006	+46 43 47.95	20.044	.013	− .02	4	18.92
5010	BD−19° 3408	K0	8.53		2 29.211	3.0781	+ .0131	− .0056	−20 17 30.23	20.044	.013	− .002	4	18.35
5011	BD+ 8° 2570	G5	9.3	8.9	12 2 34.850	+3.0706	− .0022	− .014	+ 7 56 48.90	−20.044	+ .014	− .12	4	19.18
5012	BD+37° 2249	G	9.3	8.8	2 36.080	3.0612	− .0205	+ .005	+37 13 44.34	20.044	.014	− .05	4	19.43
5013	BD− 8° 3288	F5	8.1	8.68	2 37.507	3.0751	+ .0067	.000	− 8 57 50.83	20.044	.014	− .03	4	19.20
5014	Wi (1) 11^{h} 1008	F0	6.70	6.9	2 41.581	3.0760	+ .0083	− .0078	−11 47 44.00	20.044	.014	.000	4	18 75
5015	BD+72° 557		*9.05*	8.8	2 43.41	3.0233	− .0883	− .0026	+72 12 57.62	20.044	.014	+ .005	4	19.36
5016	CD−28° 9297	G5	8.3	7.8	12 2 46.719	+3.0816	+ .0185	+ .0021	−28 40 50.00	−20.044	+ .013	− .041	4	19.95
5017	BD+34° 2286	K5	*8.04*	8.3	2 48.853	3.0617	− .0179	− .004	+33 53 13.73	20.044	.014	+ .04	4	18.45
5018	Pi 11^{h} 234	F8	6.91	7.13	2 55.052	3.0800	+ .0150	− .0067	−23 19 18.45	20.044	.014	+ .027	4	19.71
5019	BD+ 0° 2894	K0	7.73	7.76	3 5.692	3.0728	+ .0022	− .0023	− 0 11 4.90	20.043	.015	+ .008	4	19.17
5020	BD+18° 2568	A5	7.9	9.3	3 9.278	3.0667	− .0076	− .003	+18 3 10.35	20.043	.015	− .01	4	18.56
5021	BD− 9° 3434	A0	8.11	7.99	12 3 16.049	+3.0762	+ .0075	− .0048	−10 17 38.95	−20.043	+ .015	− .015	4	19.25
5022	BD+12° 2424	K0	8.9	8.9	3 26.024	3.0683	− .0044	− .007	+12 23 8.11	20.043	.015	+ .04	4	18.55
5023	BD+65° 867	F5	*8.86*	8.7	3 44.97	3.0257	− .0601	− .0017	+65 2 25.80	20.042	.016	+ .020	4	18.67
5024	BD+57° 1356	F2	*8.82*	8.81	3 58.832	3.0369	− .0428	− .004	+57 1 4.48	20.042	.016	− .04	4	18.67
5025	BD+41° 2274		*9.42*	9.3	4 34.370	3.0495	− .0235	.000	+41 5 29.87	20.041	.017	− .06	4	18.74
5026	BD+51° 1728	F5	*9.25*	9.23	12 4 50.430	+3.0380	− .0337	− .005	+50 51 53.92	−20.041	+ .018	− .06	5 4	20.18 21.20
5027	BD+25° 2466	K0	*8.97*		4 52.264	3.0594	− .0118	− .0011	+25 8 46.62	20.041	.018	− .028	4	17.70
5028	BD+22° 2442	G0	*9.52*		4 52.378	3.0611	− .0099	− .0287	+22 13 59.50	20.041	.018	+ .028	4	18.76
5029	BD+32° 2227	F5	*8.95*	9.1	5 4.174	3.0540	− .0166	.000	+32 22 2.18	20.040	.018	+ .03	4	18.23
5030	BD+16° 2343 *m.*	K0	8.6	9.1	5 14.713	3.0640	− .0062	+ .001	+15 51 35.73	20.040	.018	− .16	4	19.16
5031	BD+ 3° 2605	K0	*8.44*	8.37	12 5 16.086	+3.0708	+ .0003	− .0013	+ 3 33 6.13	−20.040	+ .018	+ .005	4	18.69
5032	Grmb 1854	A2	7.27	7.25	5 24.876	3.0471	− .0217	− .0036	+39 4 42.04	20.040	.019	− .078	4	17.87
5033	10 Virginis	K0	6.13	6.4	5 35.259	3.0714	+ .0010	+ .0030	+ 2 20 49.09	20.039	.019	− .184	4	18.30
5034	BD+69° 647	F5	*8.94*	9.30	5 46.52	2.9850	− .0711	− .0011	+69 0 31.67	20.039	.019	− .030	4	18.45
5035	Brad 1627	F0	5.74	5.85	5 58.792	3.0689	− .0011	− .0111	+ 6 15 6.32	20.038	.020	+ .017	4	18.20
5036	ε Corvi	K0	3.21	2.7	12 6 0.429	+3.0870	+ .0145	− .0047	−22 10 29.38	−20.038	+ .020	+ .007	4	18.94
5037	BD+25° 2468	F5	8.71	8.48	6 2.190	3.0565	− .0116	+ .0005	+24 42 21.28	20.038	.020	+ .020	4	18.30
5038	CD−28° 9344		10.0	ft.	6 23.439	3.0930	+ .0187	− .0019	−28 34 51.00	20.037	.021	+ .012	4	19.47
5039	Brad 1628	A0	6.34	6.09	6 27.027	3.0610	− .0070	− .0007	+17 15 15.64	20.037	.021	− .009	4	18.44
5040	BD−14° 3469	G0	8.9	8.7	6 40.472	3.0828	+ .0100	− .0033	−14 29 19.86	20.037	.020	− .013	4	18.48

5030. $8^{\mathrm{m}}8$–$10^{\mathrm{m}}4$, $0''.6$, 292°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5041	BD+52° 1614	K0	7.56	7.2	12 6 50.591	+3.0212	−0.0350	−0.001	+52 14 30.00	−20.036	+0.022	−0.03	4	18.41
5042	Wi (1) 12h 45	K0	7.12	6.97	7 15.833	3.0744	+.0034	+.0010	−2 15 8.55	20.035	.020	−.097	4	18.57
5043	BD+0° 2907	K0	7.74	7.48	7 19.676	3.0722	+.0020	−.0017	+0 38 18.64	20.035	.021	+.012	4	19.19
5044	BD−21° 3490	Ma	8.5	8.06	7 28.945	3.0901	+.0143	−.0010	−21 40 58.54	20.034	.023	−.022	4	19.22
5045	BD+48° 2006		*9.07*	9.2	7 29.180	3.0240	−.0300	−.002	+48 9 30.53	20.034	.023	−.02	4	19.21
5046	BD+58° 1363	K7	*8.64*	8.96	12 7 41.699	+2.9996	−.0440	−.004	+58 27 17.32	−20.034	+.023	−.01	4	18.42
5047	Brad 1630	K0	5.81	5.76	7 47.744	3.0502	−.0122	−.0037	+26 18 57.79	20.034	.024	−.038	4	19.00
5048	Oelt 11982	K2	7.40	7.45	7 50.883	3.0945	+.0167	−.0005	−25 29 46.64	20.033	.024	−.036	4	19.23
5049	BD−3° 3249	K2	7.9	7.36	8 7.928	3.0760	+.0044	+.0008	−3 57 23.81	20.033	.024	−.016	4	18.96
5050	BD+14° 2482	F5	*9.96*		8 19.216	3.0606	−.0051	+.005	+14 2 14.08	20.032	.024	+.07	5	19.44
5051	4 H Draconis	A5	5.12	5.46	12 8 28.11	+2.8392	−.1173	+.0032	+78 3 38.32	−20.031	+.024	+.018	9	18.73
5052	BD+37° 2255		*8.92*	8.7	8 30.481	3.0357	−.0193	−.001	+36 42 3.52	20.031	.025	+.03	4	19.41
5053	BD+87° 104	K5	*8.10*	8.25	8 47.45	1.954	−.175	−.030	+87 22 37.55	20.030	.019	+.009	4	18.26
5054	BD+28° 2089	K2	*9.31*	8.60	8 49.155	3.0454	−.0132	−.0004	+28 0 18.99	20.030	.026	−.009	4	18.44
5055	BD−16° 3415	K2	8.5	8.4	8 50.079	3.0882	+.0114	−.0012	−16 41 25.84	20.030	.026	−.009	4	19.22
5056	BD+61° 1283	A2	*8.46*	7.93	12 9 6.27	+2.9775	−.0478	−.004	+60 51 18.20	−20.029	+.026	−.11	4	18.92
5057	Brad 1635	A2	5.81	6.0	9 21.541	3.0624	−.0032	−.0061	+10 42 26.68	20.028	.026	−.033	4	17.95
5058	CD−26° 9034 *m.*	F5	8.2	8.1	9 32.092	3.1009	+.0177	−.0012	−26 52 34.60	20.028	.025	+.003	4	19.53
5059	BD−5° 3453	F8	9.45		9 42.194	3.0787	+.0056	−.004	−6 3 9.20	20.027	.027	.00	4	19.00
5060	BD+7° 2523	G5	*9.89*		9 49.264	3.0653	−.0014	−.013	+7 21 53.86	20.027	.028	+.02	4	19.18
5061	BD+63° 1003		*9.78*		12 9 50.16	+2.9587	−.0526	−.003	+63 17 32.04	−20.027	+.027	−.04	4	18.81
5062	BD+42° 2281	F5	8.10	8.03	10 0.292	3.0191	−.0240	−.004	+42 36 3.45	20.026	.028	−.06	4	18.79
5063	BD+79° 387 *m.*	G5	9.7		10 1.64	2.7754	−.1199	+.0103	+78 52 48.36	20.026	.026	−.093	4	19.10
5064	BD+31° 2343	G0	*8.50*	8.45	10 6.692	3.0369	−.0153	−.0092	+31 15 58.63	20.025	.028	−.113	4	18.48
5065	BD−18° 3351	K2	8.1	8.3	10 8.795	3.0927	+.0127	−.0030	−18 42 33.05	20.025	.028	−.016	4	18.41
5066	BD−8° 3308	A5	8.1	8.10	12 10 31.122	+3.0819	+.0070	−.004	−8 32 42.00	−20.024	+.029	+.01	4	18.50
5067	BD−9° 3467	K2	8.9	8.6	10 45.065	3.0837	+.0077	+.001	−9 57 19.18	20.023	.030	.00	4	18.64
5068	1 Can Ven	K0	6.26	6.25	10 45.806	2.9867	−.0360	−.0011	+53 52 47.25	20.023	.029	−.021	4	18.91
5069	δ Urs Maj	A2	3.44	[illegible]	11 28.398	2.9678	−.0411	+.0137	+57 28 37.38	20.020	.030	+.003	4	19.50
5070	BD−19° 3445	K0	6.98	7.08	11 28.568	3.0972	+.0137	−.0038	−20 5 7.54	20.020	.031	+.030	4	18.24
5071	γ Corvi	B8	2.78	3.34	12 11 41.339	+3.0939	+.0118	−.0112	−17 5 51.74	−20.019	+.031	+.011	11	21.53
5072	BD+50° 1903	G0	*9.46*	9.5	11 49.776	2.9898	−.0313	+.003	+50 14 35.95	20.018	.031	−.01	4	18.70
5073	Grmb 1865	K0	6.55	6.62	11 56.56	2.8451	−.0805	−.0041	+72 59 46.28	20.018	.030	−.038	9	19.39
5074	BD+4° 2594	F8	*8.02*	8.40	12 2.082	3.0678	+.0005	−.0039	+4 0 17.85	20.018	.032	−.021	4	18.79
5075	2 Can Ven *br.*	K5	5.92	5.73	12 7.213	3.0111	−.0224	+.0019	+41 6 19.46	20.017	.032	−.046	4	19.46
5076	BD+10° 2397	G5	*9.44*		12 12 7.808	+3.0601	−.0027	−.008	+10 5 19.19	−20.017	+.032	+.07	4	18.77
5077	Brad 1641	K0	5.06	5.2	12 17.770	3.0404	−.0107	−.0016	+24 23 24.08	20.017	.033	−.018	4	18.59
5078	BD−1° 2639	K0	8.22	7.92	12 37.939	3.0757	+.0037	−.0015	−2 17 40.90	20.015	.034	−.010	4	18.59
5079	Lal 23006	A2	5.96	5.8	12 55.666	3.0947	+.0113	−.0047	−16 14 57.26	20.013	.034	+.006	4	19.72
5080	BD+2° 2525 *br.*	A5	*8.85*	8.65	13 2.030	3.0698	+.0015	−.0014	+2 9 24.65	20.013	.034	+.008	4	18.18
5081	BD−11° 3272	K0	8.9	8.8	12 13 12.959	+3.0888	+.0089	−.0045	−11 49 50.30	−20.012	+.034	−.017	4	19.03
5082	BD+29° 2274	G0	*8.79*	9.20	13 17.512	3.0265	−.0136	−.0043	+29 10 13.63	20.012	.034	−.001	4	19.19
5083	BD+36° 2257		8.8	8.60	13 31.843	3.0155	−.0182	+.001	+35 58 38.43	20.010	.035	+.01	4	19.41
5084	BD−5° 3467	K0	9.6		13 36.086	3.0808	+.0057	.000	−5 51 17.07	20.010	.035	+.03	4	19.45
5085	BD+8° 2585	K0	8.9	8.59	13 38.414	3.0614	−.0016	−.003	+8 6 31.55	20.010	.035	−.02	4	19.43
5086	BD+21° 2406	G0	*9.47*	9.5	12 13 58.277	+3.0417	−.0085	−.007	+20 51 55.36	−20.008	+.036	.00	4	19.22
5087	BD+42° 2291	K0	*8.97*	8.52	14 19.468	2.9963	−.0233	−.002	+42 28 11.76	20.006	.036	+.01	4	19.64
5088	BD+19° 2550		*8.71*	8.60	14 20.684	3.0430	−.0077	.0000	+19 35 30.92	20.006	.037	+.012	4	19.29
5089	BD−3° 3264	A5	9.3		14 27.395	3.0780	+.0043	−.0027	−3 37 26.67	20.005	.037	−.004	4	19.55
5090	BD−22° 3336	G0	10.0		14 29.236	3.1078	+.0154	−.0021	−22 34 10.59	20.005	.037	+.009	4	20.00
5091	Wi (2) 12h 225	*	6.14	6.33	12 14 29.772	+3.0226	−.0145	+.0060	+30 41 45.16	−20.005	+.036	−.113	4	19.27
5092	6 B Urs Min	F0	6.28		14 30.33	0.465	+.648	−.069	+88 8 35.87	20.005	.012	+.058	104 100	18.96 19.03
5093	Brad 1643	A3	5.92	5.6	14 34.147	3.0732	+.0029	+.0016	−0 20 33.43	20.005	.037	−.018	4	19.63
5094	BD+85° 199		*9.07*		14 35.57	2.1498	−.1272	−.0215	+84 44 9.99	20.005	.028	+.007	4	19.76
5095	BD+55° 1523	G0	*9.58*		14 39.074	2.9480	−.0372	+.001	+55 36 5.66	20.004	.036	+.01	4	19.75
5096	BD+51° 1742	M0	*9.32*	9.3	12 15 1.845	+2.9622	−.0321	−.003	+51 36 29.16	−20.002	+.037	−.03	4	19.53
5097	Brad 1644 *br.*	K0	7.03	7.03	15 13.023	3.0859	+.0072	+.0008	−8 28 11.63	20.001	.038	−.033	4	19.88
5098	BD+23° 2448	A3	6.15	[illegible]	15 16.797	3.0440	−.0099	−.003	+23 28 44.88	20.001	.038	+.01	4	18.99
5099	CD−25° 9171	K2	10.00	ft.	15 45.277	3.1163	+.0173	−.0041	−25 23 0.16	19.998	.039	−.056	4	20.85
5100	BD+12° 2448	Mb	8.0	8.42	15 47.709	3.0531	−.0037	−.003	+12 2 34.61	19.998	.039	+.02	4	19.49

5058. 8^{m}–9^{m}1, 0″.3, 122°.
5063. 10^{m}4–10^{m}5, 2″.6, 11°.

5075. 8^{m}2, 12″, 258°.
5080. 13^{m}, 1″.8, 176°.

5091. F5, A2
5097. 15^{m}, 3″.4, 164°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5101	η Virginis	A0	4.00	3.97	12 15 48.727	+3.0731	+0.0029	−0.0041	− 0 13 20.24	−19.998	+0.040	−0.025	69 54	19.55 19.66
5102	BD+48° 2017	A3	8.2	8.5	15 54.684	2.9689	− .0283	− .001	+48 14 48.99	19.997	.039	.00	4	19.44
5103	BD−14° 3494	K0	8.9	8.0	16 14.789	3.0970	+ .0105	− .0032	−14 23 14.47	19.995	.041	+ .018	4	19.58
5104	c Virginis	K0	5.10	5.37	16 17.182	3.0665	+ .0008	− .0198	+ 3 45 29.00	19.995	.041	− .078	4	19.68
5105	CD−24° 10498	G5	9.8	ft.	16 20.197	3.1155	+ .0166	− .0146	−24 11 53.88	19.994	.042	+ .006	5 6	20.62 20.08
5106	BD+45° 2026		9.0	8.9	12 16 36.484	+2.9771	− .0248	− .004	+44 39 31.12	−19.993	+ .040	− .07	4	19.71
5107	BD+ 7° 2535	K0	8.5	9.1	16 50.547	3.0606	− .0009	− .002	+ 7 0 57.16	19.991	.041	.00	4	19.58
5108	CD−28° 9438	K0	9.8		16 51.062	3.1266	+ .0197	− .0012	−28 44 23.21	19.991	.042	+ .004	4	19.73
5109	Brad 1655	K2	5.72	5.35	16 58.661	2.9125	− .0404	+ .0055	+58 18 34.39	19.990	.040	− .071	4	18.06
5110	BD+34° 2307		*9.85*		17 2.466	3.0046	− .0167	− .009	+34 26 39.74	19.990	.041	+ .02	4	20.07
5111	BD+32° 2234	F5	*8.63*	8.90	12 17 9.838	+3.0108	− .0148	+ .0016	+31 44 47.65	−19.989	+ .041	− .024	4	18.50
5112	BD+16° 2364	G5	*9.42*		17 15.838	3.0434	− .0057	− .009	+16 16 17.81	19.989	.042	+ .04	4	19.45
5113	BD+74° 492	G5	*9.62*	9.1	17 24.48	2.7120	− .0777	+ .0005	+74 17 45.83	19.987	.039	+ .007	4	19.50
5114	BD+22° 2464	F5	7.39	7.5	17 42.970	3.0304	− .0090	− .001	+22 18 58.99	19.985	.041	+ .02	4	18.35
5115	BD+27° 2116	G5	*8.63*	8.57	17 43.024	3.0200	− .0119	− .0017	+27 3 8.05	19.985	.042	+ .025	4	18.69
5116	BD+33° 2225	K0	7.9	7.65	12 18 1.982	+3 0031	− .0159	− .004	+33 32 3.14	−19.983	+ .043	− .01	4	18.73
5117	BD+82° 361		*9.33*		18 7.82	2.3524	− .1047	+ .0152	+81 39 34.08	19.982	.036	− .021	5	20.59
5118	BD+ 6° 2599	F8	6.46	6.3	18 27.920	3.0619	− .0001	− .0114	+ 5 45 1.17	19.980	.044	− .060	[illegible]	18.72
5119	12 Comæ	*	4.78	5.00	18 29.126	3.0195	− .0113	− .0006	+26 17 24.17	19.980	.044	− .014	4	19.81
5120	BD−17° 3608		9.8		18 34.137	3.1072	+ .0126	− .0038	−17 41 16.14	19.979	.045	+ .020	[illegible]	20.14
5121	BD−19° 3473		9.3		12 18 41.312	+3.1122	+ .0140	− .003	−19 57 9.35	−19.979	+ .046	+ .02	4	19.84
5122	BD+40° 2529	K0	8.42	7.93	18 52.669	2.9814	− .0203	− .004	+39 43 8.65	19.977	.044	+ .03	4	19.22
5123	BD+13° 2527		*9.84*		19 10.910	3.0458	− .0041	+ .001	+13 32 32.14	19.975	.046	+ .04	4	20.21
5124	BD+53° 1541	F8	*8.96*	8.68	19 22.623	2.9193	− .0334	− .002	+53 37 55.49	19.974	.045	+ .03	4	19.62
5125	BD−21° 3530	F8	9.1		19 25.476	3.1192	+ .0156	− .0054	−22 19 30.59	19.973	.047	+ .043	[illegible]	18.73
5126	CD−29° 9712	K2	9.0		12 19 50.225	+3.1396	+ .0210	+. 0005	−30 3 42.13	−19.970	+ .048	− .176	4	19.50
5127	BD+17° 2475	K2	*8.92*	8.7	19 54.305	3.0376	− .0058	− .0052	+16 51 57.05	19.970	.047	− .245	4	18.81
5128	BD+46° 1781		*9.68*		20 4.882	2.9509	− .0255	+ .001	+46 10 17.82	19.968	.046	− .04	4	19.24
5129	Brad 1662	K0	4.97	4.98	20 8.554	2.9225	− .0313	+ .0010	+52 0 19.26	19.968	.046	+ .007	4	19.05
5130	BD+29° 2284	G0	*9.76*		20 12.410	3.0079	− .0127	+ .0046	+28 51 0.50	19.967	.048	− .041	4	19.41
5131	BD+10° 2418	K0	*8.77*	8.67	12 20 12.450	+3.0521	− .0022	− .003	+ 9 57 5.59	−19.967	+ .048	+ .01	4	18.92
5132	BD− 9° 3490	K0..	8.1	7.76	20 13.985	3.0936	+ .0083	− .001	−10 1 58.36	19.967	.049	+ .05	4	19.15
5133	BD+ 5° 2623	K0	8.11	7.88	20 27.367	3.0628	+ .0005	+ .0018	+ 4 46 29.59	19.965	.048	− .029	4	19.02
5134	BD+38° 2329	G5	9.2		20 32.788	2.9787	− .0188	− .004	+38 9 2.17	19.965	.048	+ .01	4	19.13
5135	BD− 3° 3280	G5	8.1	7.76	20 53.088	3.0808	+ .0051	− .0105	− 3 46 39.25	19.962	.049	− .212	4	18.13
5136	Lac 5144	K0	6.34	6.52	12 21 6.837	+3.1362	+ .0190	+ .0002	−27 18 20.37	−19.960	+ .050	− .026	4	18.56
5137	CD−23° 10534	K2	9.0	8.6	21 6.882	3.1273	+ .0167	− .0022	−23 56 54.36	19.960	.050	− .016	4	19.01
5138	Lac 5142	B9	5.77		21 8.475	3.1581	+ .0247	− .0033	−34 44 35.35	19.960	.051	− .013	5	20.60
5139	Grmb 1888	G5	6.37	6.1	21 22.87	2.8147	− .0481	− .0034	+64 14 44.90	19.958	.047	+ .009	4	17.93
5140	BD− 1° 2664	F2	9.3		21 23.865	3.0764	+ .0039	+ .0026	− 1 41 58.70	19.958	.050	− .033	4	18.60
5141	CD−26° 9130	F5	7.7	7.89	12 21 25.515	+3.1345	+ .0184	− .0089	−26 22 2.31	−19.958	+ .051	− .050	4	19.28
5142	BD+24° 2458	K0	7.62	7.35	21 38.541	3.0172	− .0096	− .004	+23 47 37.90	19.956	.050	+ .02	4	17.93
5143	BD−11° 3299	K0	9.1	8.6	21 50.267	3.0985	+ .0091	− .0017	−11 26 48.74	19.954	.052	+ .002	4	18.73
5144	6 Can Ven	K0	5.22	5.32	21 54.640	2.9677	− .0197	− .0066	+39 27 44.42	19.954	.050	− .039	4	18.94
5145	BD+ 1° 2696	K0	*8.21*	8.41	22 11.319	3.0706	+ .0026	− .0029	+ 0 57 28.11	19.951	.051	− .011	4	18.21
5146	BD+68° 684		*9.07*	9.4	12 22 14.08	+2.7472	− .0557	− .0063	+68 18 59.89	−19.951	+ .047	− .010	4	18.85
5147	BD+53° 1547	F8	*8.36*	8.43	22 16.638	2.8999	− .0319	+ .001	+53 7 10.98	19.951	.049	+ .01	4	18.89
5148	BD−12° 3637	F2	8.3	8.0	22 23.319	3.1036	+ .0103	− .0018	−13 21 7.06	19.950	.053	− .005	4	18.91
5149	14 Comæ	A5	5.15	5.0	22 24.160	3.0042	− .0118	− .0017	+27 42 40.79	19.950	.051	− .018	4	19.32
5150	323 G Hydræ	A0	5.68		22 38.478	3.1563	+ .0230	− .0009	−32 23 11.17	19.948	.054	− .039	4	19.60
5151	BD+14° 2502	K0	8.89	8.89	12 22 50.278	+3.0384	− .0044	− .003	+14 29 14.62	−19.946	+ .053	− .01	4	19.01
5152	BD− 5° 3500	K2	8.7	8.57	22 51.342	3.0858	+ .0061	− .004	− 5 37 9.18	19.946	.054	.00	4	19.84
5153	BD+49° 2139	G5	7.89	7.28	22 56.216	2.9185	− .0276	− .006	+49 6 15.52	19.945	.051	.00	4	18.92
5154	15 Comæ	K0	4.56	4.62	22 57.139	2.9995	− .0123	− .0066	+28 42 47.13	19.945	.052	− .087	4	18.98
5155	BD+70° 698	G0	*8.34*	8.42	23 21.43	2.6956	− .0588	− .0210	+70 10 33.99	19.941	.048	− .135	5	20.54
5156	BD+ 8° 2604	K2	8.1	8.12	12 23 24.250	+3.0525	− .0011	− .007	+ 8 27 20.21	−19.941	+ .054	− .02	4	18.78
5157	W1 (2) 12h 419	K0	7.52	7.16	23 31.261	3.0275	− .0063	− .0024	+18 16 39.32	19.940	.054	− .038	4	18.96
5158	BD+ 2° 2542	G5	8.9	8.9	23 36.974	3.0672	+ .0021	− .0011	+ 2 16 47.52	19.939	.054	− .002	4	18.50
5159	Grmb 1894	*	6.85	6.50	23 37.868	2.9497	− .0212	− .0030	+41 47 52.60	19.939	.052	− .008	4	18.97
5160	BD− 6° 3577	F5	8.6	8.52	23 52.426	3.0901	+ .0070	+ .001	− 7 7 29.96	19.937	.056	+ .05	4 5	19.04 18.11

5119. F5, A3.

5159. F5, A3.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5161	BD+33° 2238	K0	8.78	8.80	12 23 52.703	+2.9827	−0.0148	+0.001	+32 55 5.45	−19.936	+0.054	−0.11	4	18.77
5162	BD+61° 1295	A2	7.85	7.59	23 52.97	2.8157	− .0424	.000	+61 35 42.75	19.936	.051	+ .01	4	19.60
5163	BD+16° 2378	K0	8.67	8.54	24 9.073	3.0332	− .0049	+ .003	+15 41 42.49	19.934	.055	− .02	4	18.69
5164	BD+54° 1528	K2	9.58	9.3	24 36.304	2.8717	− .0329	− .001	+54 31 50.97	19.930	.053	− .02	5	19.77
5165	BD+39° 2525		9.71	9.1	24 43.802	2.9550	− .0191	+ .002	+39 16 24.47	19.929	.055	+ .02	4	19.36
5166	BD+45° 2040		9.51		12 24 52.214	+2.9297	− .0232	+ .002	+44 39 13.53	−19.927	+ .055	+ .02	4	19.17
5167	Brad 1673	A0	5.38	5.5	24 55.061	3.0009	− .0107	− .0014	+26 21 19.79	19.927	.056	− .022	4	18.39
5168	BD−15° 3476	K0	8.5	7.96	24 55.244	3.1142	+ .0119	− .0066	−15 56 59.57	19.927	.058	− .009	4	18.01
5169	BD+79° 394		8.77	9.1	24 58.61	2.2766	− .0747	+ .0100	+79 39 9.78	19.926	.045	+ .010	4	19.24
5170	BD+11° 2467		8.87	8.92	25 25.095	3.0424	− .0028	− .003	+11 34 51.74	19.922	.056	+ .02	4	18.25
5171	20 Comæ	A2	5.72	5.95	12 25 42.136	+3.0143	− .0079	+ .0027	+21 20 20.46	−19.919	+ .056	− .046	4	18.60
5172	δ Corvi *br.*	A0	3.12	3.18	25 43.353	3.1158	+ .0120	− .0144	−16 4 12.38	19.919	.058	− .143	4	18.78
5173	BD−11° 3311	G5	8.5	9.11	25 50.312	3.1036	+ .0095	− .0056	−11 37 22.42	19.918	.058	− .005	4	17.97
5174	BD+12° 2481		9.11	9.31	25 52.334	3.0396	− .0031	− .013	+12 23 47.12	19.918	.057	− .04	4	18.77
5175	BD−17° 3636	F2	8.7	8.84	26 1.562	3.1205	+ .0130	− .0030	−17 29 57.80	19.916	.060	− .004	4	19.21
5176	Pi 12ʰ 105	K5	5.87	5.6	12 26 6.058	+3.1380	+ .0167	− .0021	−23 15 15.82	−19.915	+ .060	− .009	4	19.27
5177	BD+20° 2728	K5	9.0	8.91	26 7.330	3.0180	− .0069	.000	+19 47 1.91	19.915	.059	− .02	4	18.92
5178	74 Urs Maj	A5	5.44	5.54	26 13.559	2.8203	− .0376	− .0087	+58 50 44.42	19.914	.055	+ .082	4 5	18.18 17.83
5179	BD+63° 1017	G	9.18	9.2	26 21.95	2.7679	− .0438	− .006	+63 17 23.27	19.913	.055	+ .01	4	18.99
5180	Pi 12ʰ 108	K0	7.06	7.04	26 43.831	3.0825	+ .0052	− .0052	− 3 37 8.32	19.909	.061	− .001	4	18.18
5181	BD−19° 3506	F5	8.7		12 26 52.503	+3.1292	+ .0144	− .0063	−19 52 20.66	−19.907	+ .062	+ .005	4	19.17
5182	BD− 8° 3363	A0	8.3	8.13	26 55.617	3.0985	+ .0083	+ .001	− 9 20 44.21	19.907	.062	+ .03	4	19.34
5183	BD− 1° 2683	G0	9.5		27 3.606	3.0770	+ .0042	+ .0008	− 1 37 29.87	19.906	.061	− .001	4	19.24
5184	BD+47° 1966		9.16	9.1	27 6.981	2.9012	− .0253	− .004	+47 24 7.84	19.905	.058	− .01	4	19.17
5185	BD+ 1° 2707		9.36		27 7.383	3.0706	+ .0030	− .0032	+ 0 46 47.64	19.905	.061	− .003	5	18.69
5186	BD+ 4° 2624	G0	8.5	8.13	12 27 7.856	+3.0617	+ .0013	− .0013	+ 4 0 19.36	−19.905	+ .061	− .066	4	18.93
5187	Wi (1) 12ʰ 398	K5	6.16	6.1	27 17.490	3.0503	− .0007	− .0026	+ 8 2 45.15	[illegible]	.061	+ .013	4	18.77
5188	BD+77° 475	K0	7.49	7.25	27 49.33	2.3646	− .0662	− .0105	+77 7 41.69	19.898	.050	− .008	4	18.43
5189	BD+30° 2287	F0	7.46	7.65	27 52.584	2.9800	− .0125	− .0008	+29 45 21.62	19.897	.061	+ .002	4	18.83
5190	BD+67° 750		8.88	9.1	28 2.04	2.6878	− .0489	+ .0099	+67 2 34.94	19.895	.056	− .026	5 4	19.13 18.87
5191	BD−21° 3557	A5	7.9	7.99	12 28 13.606	+3.1381	+ .0157	+ .0025	−21 43 45.77	−19.893	+ .065	+ .007	4	19.25
5192	BD+ 6° 2626	F0	9.5	9.2	28 17.621	3.0550	+ .0003	− .002	+ 6 8 37.49	19.893	.064	+ .05	4	19.05
5193	BD+27° 2145	F2	9.0	9.1	28 22.027	2.9878	− .0109	− .0020	+27 13 24.65	19.892	.063	− .071	4	18.55
5194	BD+46° 1792		8.59	8.08	[illegible]	2.9021	− .0237	.000	+45 56 20.13	19.892	.061	− .01	4	19.29
5195	BD+36° 2279	G5	8.62	8.55	28 39.572	2.9504	− .0166	− .002	+36 16 22.00	19.889	.062	− .04	4	18.40
5196	BD+57° 1378	G0	8.10	7.80	12 28 46.893	+2.8108	− .0348	− .002	+57 25 13.57	−19.887	+ .060	− .12	4	18.96
5197	Brad 1682	K0	6.46	6.0	28 59.937	3.0407	− .0021	− .0043	+10 44 12.90	19.885	.064	.000	4	18.86
5198	BD+22° 2486	F8	9.49	9.3	29 21.153	3.0028	− .0081	+ .002	+22 16 37.38	19.881	.064	− .03	4	18.47
5199	Pulk (55) 1886	G5	5.76	5.82	29 25.198	3.1103	+ .0102	− .0018	−12 23 24.18	19.880	.067	+ .039	4	19.28
5200	BD+30° 2291	K0	8.53	8.40	29 32.087	2.9716	− .0127	− .0028	+30 28 53.18	19.879	.064	+ .007	4	18.75
5201	BD+56° 1604	G0	9.88		12 29 35.006	+2.8177	− .0330	+ .001	+55 59 42.22	−19.878	+ .061	− .02	4	19.00
5202	Grmb 1904	K0	6.72	6.22	29 35.994	2.9358	− .0179	− .0080	+38 30 37.51	19.878	.064	− .014	5 4	19.09 19.61
5203	CD−29° 9806	K5	9.2		29 51.295	3.1718	+ .0215	+ .0007	−29 43 7.99	19.875	.069	− .065	4	18.80
5204	8 Can Ven	G0	4.32	4.42	29 56.878	2.9171	− .0202	− .0628	+41 47 31.37	19.874	.064	+ .281	6 5	19.05 19.84
5205	κ Draconis	B5	3.88	4.02	30 4.60	2.5862	− .0525	− .0118	+70 13 44.72	19.873	.058	+ .006	14	19.98
5206	β Corvi	G5	2.84	3.6	12 30 10.906	+3.1470	+ .0167	.0000	−22 57 16.32	−19.872	+ .068	− .061	4	19.22
5207	23 Comæ	A0	4.78	5.01	30 51.966	2.9963	− .0084	− .0052	+23 4 10.52	19.863	.067	+ .007	4	19.11
5208	BD+23° 2476	G5	8.6	8.78	30 58.471	2.9941	− .0087	+ .003	+23 35 39.52	19.862	.067	− .19	4	18.04
5209	24^1 Comæ *br. f.*	K0	5.18	4.88	31 7.042	3.0111	− .0060	+ .0003	+18 49 2.50	19.861	.068	+ .016	120 102	20.11 20.09
5210	BD+59° 1449	K5	9.72		31 20.464	2.7633	− .0364	+ .001	+59 30 37.59	19.858	.063	− .04	4	18.32
5211	BD− 6° 3598	F0	8.1	8.30	12 31 37.204	+3.0953	+ .0073	− .004	− 7 0 23.92	−19.855	+ .070	+ .04	4	18.67
5212	BD+34° 2336	K5	8.82	8.80	31 43.816	2.9460	− .0150	− .001	+34 29 59.78	[illegible]	.067	.00	4	18.82
5213	Rad 45 2887	K5	7.50	7.12	32 3.581	2.8783	− .0236	− .0008	+46 13 15.56	19.849	.064	+ .010	4	18.88
5214	BD−14° 3541		8.7	8.9	32 13.060	3.1228	+ .0118	− .001	−14 58 28.52	19.847	.073	+ .01	5 4	18.21 18.66
5215	*f* Virginis	A0	5.90	5.90	32 40.006	3.0906	+ .0065	− .0020	− 5 23 27.79	19.842	.073	− .027	4	19.05
5216	BD+17° 2504	K2	5.78	[illegible]	12 32 57.673	+3.0122	− .0053	− .003	+17 31 48.11	−19.838	+ .071	.00	4	18.84
5217	CD−25° 9344	K5	8.3	8.5	33 0.322	3.1645	+ .0187	+ .0007	−25 34 41.47	19.838	.075	− .024	4	19.00
5218	BD+15° 2483		8.96	8.8	33 0.628	3.0224	− .0067	− .001	+14 41 32.63	19.838	.072	− .01	4	18.78
5219	BD+ 9° 2648	A2	6.62	7.12	33 4.570	3.0415	− .0009	− .006	+ 9 14 13.28	19.837	.072	+ .02	5	18.23
5220	BD+66° 765		9.07	8.87	33 14.04	2.6456	− .0433	+ .0023	+65 40 23.81	19.835	.064	+ .008	4	19.10

5172. 8=1, 24″, 214°.

5209. 6=72, 20″, 271°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5221	CD−27° 8785	F0	8.0		12 33 16.886	+3.1754	+0.0205	−0.0040	−27 58 33.27	−19.834	+0.075	−0.050	4	19.45
5222	BD+36° 2288		*9.67*		33 20.719	2.9310	− .0159	− .011	+36 11 3.56	19.833	.070	+ .08	4	18.54
5223	BD+50° 1934	K5	*9.50*		33 28.693	2.8366	− .0265	+ .003	+50 31 8.43	19.832	.069	+ .04	4	19.36
5224	BD+ 5° 2651		9.3	9.2	33 34.248	3.0555	+ .0012	− .0015	+ 5 2 41.90	19.831	.073	− .045	4	18.45
5225	BD+54° 1537	K0	*9.35*	9.1	33 51.059	2.8001	− .0298	− .024	+54 11 27.61	19.827	.069	+ .09	4	19.23
5226	Pi 12^{h} 142	Ma	6.02	5.67	12 34 17.542	+3.0647	+ .0026	− .0057	+ 2 17 42.07	−19.821	+ .075	− .027	4	19.44
5227	BD+32° 2263	G5	*9.43*	9.1	34 26.821	2.9451	− .0134	+ .002	+32 31 40.30	19.819	.072	− .07	4	18.55
5228	Lal 23617	F0	6.08	6.51	34 33.832	3.1372	+ .0136	− .0089	−17 48 39.13	19.818	.077	+ .028	4	19.96
5229	BD+12° 2499		*9.78*		34 49.598	3.0307	− .0022	+ .003	+11 44 24.33	19.814	.076	+ .01	4	19.27
5230	BD− 0° 2595	A0	*7.18*	8.14	34 50.654	3.0742	+ .0040	− .0055	− 0 24 52.24	19.814	.077	− .012	4	18.81
5231	9 Can Ven	A3	6.29	6.46	12 34 55.475	+2.8944	− .0191	− .0019	+41 18 52.63	−19.813	+ .072	− .031	5	20.61
5232	BD−18° 3434	K5	8.3	7.98	34 56.128	3.1436	+ .0146	− .0005	−19 16 6.22	19.813	.078	− .032	4	19.28
5233	BD+47° 1977	A3	9.2		34 58.722	2.8532	− .0234	+ .003	+47 12 46.87	19.812	.071	− .04	4	19.95
5234	BD+72° 575	A0	*8.25*	8.10	35 4.63	2.4239	− .0502	+ .0004	+72 33 58.47	19.811	.062	− .008	4	19.05
5235	χ Virginis	K0	4.78	4.67	35 6.927	3.0998	+ .0078	− .0051	− 7 33 19.52	19.810	.078	− .037	72 39	19.70 18.80
5236	Brad 1695	K0	5.51	5.5	12 35 8.562	+2.9923	− .0072	− .0053	+21 30 8.59	−19.810	+ .075	− .020	4	19.71
5237	BD−10° 3522	G0	9.6	9.5	35 19.658	3.1116	+ .0096	+ .0009	−10 43 44.41	19.808	.078	+ .020	4	19.99
5238	BD+20° 2748	G5	8.6	8.1	35 22.471	2.9960	− .0066	− .0085	+20 28 10.84	19.807	.075	− .103	4	19.35
5239	BD+68° 691	F8	*8.52*	8.62	35 25.79	2.5662	− .0446	− .0055	+67 53 27.17	19.806	.066	+ .006	4	19.73
5240	BD+56° 1612	F2	7.87	7.96	35 33.435	2.7614	− .0315	− .011	+56 26 36.34	19.805	.070	.00	4	19.42
5241	CD−29° 9853	A0	8.2	8.4	12 36 0.645	+3.1909	+ .0218	− .0028	−29 28 38.90	−19.798	+ .081	+ .040	4	20.00
5242	BD+37° 2306	A0	8.2	8.80	36 4.469	2.9123	− .0162	.000	+37 26 15.62	19.797	.075	.00	4	18.72
5243	BD+28° 2141	F8	*9.81*		36 10.570	2.9594	− .0109	+ .0021	+28 20 59.11	19.796	.076	− .026	4	20.24
5244	BD+52° 1646	F8	*8.82*	8.98	36 49.075	2.7999	− .0269	− .009	+51 55 16.14	19.787	.073	− .01	4	19.86
5245	BD+71° 624		*9.18*	9.1	36 57.36	2.4417	− .0469	− .0019	+71 13 16.38	19.785	.066	− .014	4	20.46
5246	BD− 8° 3401	Ma	7.6	7.73	12 37 0.186	+3.1060	+ .0086	− .002	− 8 48 23.69	−19.784	+ .081	+ .04	4	19.23
5247	BD+16° 2404	K2	7.9	8.06	37 4.943	3.0117	− .0040	+ .0064	+15 49 27.97	19.783	.079	− .427	4	19.98
5248	BD−22° 3423	A5	9.3		37 7.380	3.1645	+ .0173	+ .0001	−23 4 48.69	19.783	.083	+ .027	4	18.97
5249	BD+43° 2250		*9.60*		37 8.336	2.8686	− .0202	− .002	+43 26 14.74	19.783	.076	− .01	5 4	20.44 19.52
5250	BD+22° 2503	G0	8.6	8.53	37 24.804	2.9838	− .0074	− .0096	+22 16 7.33	19.779	.080	.000	4	20.44
5251	BD+11° 2484	A5	6.33	6.5	12 37 32.489	+3.0309	− .0015	− .007	+10 51 54.28	−19.777	+ .081	+ .01	4	19.45
5252	BD+ 8° 2630	K2	9.3	9.22	37 33.746	3.0412	− .0002	− .003	+ 8 13 25.04	19.777	.081	+ .03	4	19.22
5253	γ Virginis *n. pr.*	F0	3.68	3.79	37 36.112	3.0766	+ .0045	− .0376	− 1 0 34.03	19.776	.082	+ .004	4	18.86
5254	γ Virginis *s. f.*	F0	3.65	4.5	37 36.552	3.0766	+ .0045	− .0376	− 1 0 44.09	19.776	.082	+ .004	4	20.06
5255	BD+19° 2595		*9.34*	9.3	37 40.682	2.9984	− .0056	− .001	+18 46 18.69	19.775	.080	− .01	4	19.73
5256	BD−20° 3699	F8	8.7	8.67	12 37 41.922	+3.1583	+ .0161	− .0050	−21 21 17.76	−19.775	+ .084	− .021	4	20.74
5257	BD+69° 672		*9.45*		37 49.36	2.4980	− .0441	− .0004	+69 5 40.50	19.773	.068	− .009	4	20.03
5258	ρ Virginis	A0	4.95	4.97	37 50.108	3.0313	− .0015	+ .0061	+10 40 34.91	19.772	.081	− .101	62 52	19.64 19.67
5259	BD+ 6° 2645	K0	9.5	8.9	37 54.764	3.0501	+ .0010	− .001	+ 5 51 18.46	19.772	.082	+ .02	4	19.96
5260	CD−25° 9386	G0	10.0	ft.	37 56.427	3.1793	+ .0192	− .0042	−25 49 56.76	19.771	.085	− .013	4	20.06
5261	BD+48° 2049		9.1	8.4	12 37 57.813	+2.8254	− .0236	− .004	+48 17 53.73	−19.771	+ .076	.00	4	20.20
5262	76 Urs Maj	A0	5.92	6.24	38 4.58	2.6361	− .0375	− .0038	+63 9 7.63	19.769	.072	− .019	4	18.95
5263	Lal 23711	K0	6.62	6.60	38 25.819	2.9215	− .0140	− .0187	+34 7 46.20	19.764	.079	− .115	4	19.66
5264	BD−14° 3561	A2	8.2	8.68	38 38.256	3.1329	+ .0122	− .0012	−15 1 32.73	19.761	.086	− .008	4	19.28
5265	BD− 4° 3339	G5	9.8		38 49.183	3.0905	+ .0064	− .0096	− 4 31 27.14	19.758	.084	− .004	4	18.97
5266	BD+26° 2382 *br.*	G5	8.4	8.7	12 38 58.856	+2.9607	− .0095	+ .0008	+26 20 53.51	−19.756	+ .081	− .001	4	19.77
5267	BD+76° 464	K0	8.02	7.78	39 2.61	2.1777	− .0444	− .0290	+75 47 38.60	19.755	.062	+ .032	4	19.01
5268	BD+54° 1543	F8	*9.80*		39 10.846	2.7636	− .0277	+ .001	+53 40 9.24	19.753	.077	.00	4	19.52
5269	BD+50° 1943	G5	*9.31*		39 18.115	2.8041	− .0251	− .005	+49 40 24.77	19.751	.078	− .07	4	19.44
5270	BD+ 1° 2742	K0	*9.09*		39 25.612	3.0677	+ .0035	− .0084	+ 1 15 1.57	19.749	.085	+ .020	4	18.20
5271	BD+ 3° 2685	F8	*8.43*	8.25	12 39 27.261	+3.0605	+ .0024	− .0012	+ 3 3 32.25	−19.749	+ .083	+ .006	4	19.06
5272	BD+31° 2401	G5	*9.30*		39 27.399	2.9338	− .0120	+ .0056	+31 14 27.21	19.749	.082	− .202	4	19.45
5273	BD+40° 2566		*8.67*	9.16	39 34.442	2.8795	− .0175	− .003	+40 4 38.07	19.747	.080	.00	5	19.51
5274	330 G Hydræ	K2	5.73	5.73	39 44.432	3.1947	+ .0208	− .0030	−27 53 6.09	19.745	.088	− .054	4	18.76
5275	BD−12° 3685	A5	7.00	7.04	39 45.414	3.1247	+ .0109	+ .0030	−12 42 12.97	19.744	.087	− .010	4	19.28
5276	BD+60° 1417		*9.42*	9.3	12 40 2.63	+2.6629	− .0338	− .023	+60 27 14.75	−19.740	+ .076	− .06	4	19.66
5277	Pi 12^{h} 170	A2	6.65	7.22	40 4.777	3.0825	+ .0053	− .0051	− 2 24 15.92	19.739	.086	− .012	4	19.29
5278	BD+64° 915		*8.90*	8.68	40 17.21	2.5867	− .0375	− .0080	+64 19 8.36	19.736	.074	+ .030	4	18.37
5279	BD+25° 2554	*	*9.62*	9.4	40 23.870	2.9636	− .0086	− .0014	+24 57 38.35	19.735	.085	+ .017	4	19.05
5280	BD−16° 3527	K2	7.35	7.01	40 30.712	3.1461	+ .0137	− .0015	−17 20 22.92	19.733	.089	− .042	4	18.84

5253. $3^{m}65$, $5''9$, 143°; 182 yrs.; for c. g. add $+^{s}119$, $-2''49$ (1918.86); p. m. is for c. g.
5254. $3^{m}68$, $5''9$, 323°; 182 yrs.; for c. g. add $-^{s}121$, $+2''47$ (1920.06); p. m. is for c. g.

5266. 13^{m}, $5''0$, 281°.
5279. K0, G5.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5281	BD+14° 2536	K0	*8.89*	8.8	12 40 32.529	+3.0150	−0.0029	−0.002	+13 47 13.21	−19.732	+0.086	0.00	4	18.72
5282	BD− 6° 3638	G0	9.2		41 0.149	3.0997	+ .0076	− .004	− 6 30 57.92	19.725	.089	+ .08	4	19.28
5283	d^2 Virginis	A5	5.24	5.39	41 34.551	3.0384	.0000	− .0076	+ 8 6 38.49	19.716	.088	+ .001	4	18.60
5284	BD+32° 2273		*9.55*	9.5	41 45.619	2.9177	− .0127	+ .003	+32 37 0.50	19.713	.085	.00	4	18.66
5285	BD+41° 2328		*9.45*		41 48.754	2.8601	− .0179	− .006	+41 15 1.05	19.713	.084	− .04	5	19.99
5286	BD− 8° 3423	G5	8.1	7.96	12 41 50.304	+3.1106	+ .0088	+ .0216	− 8 52 16.09	−19.712	+ .091	− .218	4	18.46
5287	BD+62° 1252	G5	8.48	8.51	42 9.59	2.6068	− .0346	+ .003	+62 19 13.57	19.707	.078	− .06	4	18.82
5288	Grmb 1927	A0	6.26	6.5	42 23.83	1.5102	+ .0079	+ .0162	+81 3 33.83	19.703	.049	− .034	8	19.10
5289	BD+17° 2532	A2	*8.98*	8.36	42 29.296	2.9976	− .0043	− .002	+16 57 31.71	19.702	.089	− .01	4	18.86
5290	BD+57° 1391	K5	*8.52*	9.15	42 41.406	2.6893	− .0297	+ .004	+57 9 25.75	19.698	.081	− .08	4	18.91
5291	BD+37° 2324	F5	8.8	8.70	12 42 49.502	+2.8837	− .0153	− .003	+37 17 7.97	−19.696	+ .087	+ .01	4	18.64
5292	BD+48° 2055	Ma	8.00	7.65	42 54.362	2.7983	− .0222	− .002	+47 48 33.56	19.695	.084	− .01	4	19.16
5293	BD+23° 2491	G0	*9.22*	9.4	42 56.190	2.9675	− .0073	− .020	+22 55 29.65	19.694	.089	− .01	4	18.97
5294	BD−18° 3464	F8	9.2		43 0.092	3.1596	+ .0150	− .003	−19 13 12.85	19.693	.094	+ .03	4	19.08
5295	BD+43° 2258	F8	7.90	7.82	43 2.136	2.8352	− .0193	− .0009	+43 35 22.03	19.693	.086	− .059	4	18.90
5296	CD−28° 9702 … m.	F8	8.8	8.4	12 43 5.497	+3.2120	+ .0221	+ .0008	−29 9 13.09	−19.692	+ .096	− .024	4	19.24
5297	Lal 23844	B9	6.29	7.1	43 38.284	3.1875	+ .0186	− .0040	−24 24 57.49	19.683	.096	+ .034	4	19.33
5298	35 Virginis	Ma	6.66	6.33	43 46.948	3.0549	+ .0023	− .0003	+ 4 0 33.84	19.681	.092	− .012	4	18.27
5299	BD− 0° 2610	A5	8.9	8.8	43 49.654	3.0753	+ .0046	.0000	− 0 34 26.25	19.680	.094	+ .016	4	18.97
5300	BD−10° 3554	F2	8.9	8.7	44 5.766	3.1203	+ .0099	− .0025	−10 32 25.05	19.675	.095	+ .014	4	18.85
5301	Lac 5265	G5	5.80	5.59	12 44 10.186	+3.2040	+ .0206	− .0101	−27 9 34.55	−19.674	+ .098	− .083	4	19.12
5302	BD+21° 2457	A3	*9.85*		44 18.765	2.9725	− .0064	+ .001	+21 18 58.79	19.672	.091	− .04	5 4	19.11 20.07
5303	BD+20° 2761	Ma	7.85	7.65	44 19.548	2.9804	− .0056	− .001	+19 45 31.97	19.672	.092	.00	4	18.71
5304	BD+50° 1949	K0	*9.82*		44 33.167	+2.7611	− .0238	− .005	+50 21 40.71	19.668	+ .086	.00	4	18.78
5305	BD+86° 184		*8.90*	9.2	44 36.56	−0.522	+ .549	− .110	+85 53 6.21	19.667	− .006	+ .027	4	19.34
5306	BD+ 9° 2676	K0	8.92	8.81	12 44 41.934	+3.0288	− .0005	− .002	+ 9 37 34.82	−19.665	+ .094	+ .03	4	18.77
5307	BD+66° 772		*9.30*	8.9	44 43.59	2.4942	− .0363	+ .0086	+65 52 13.57	19.665	.079	+ .025	4	19.15
5308	BD−14° 3583		9.8		44 45.779	3.1432	+ .0126	+ .0020	−15 12 18.63	19.664	.097	− .033	4	19.33
5309	BD−22° 3452	K2	7.86	7.70	44 46.777	3.1818	+ .0175	− .0002	−22 48 9.88	19.664	.098	+ .020	4	18.99
5310	BD−19° 3577	A2	8.7		44 56.707	3.1684	+ .0157	− .0038	−20 10 19.60	19.661	.099	+ .010	4	18.80
5311	BD+15° 2511		*9.87*		12 44 57.154	+3.0000	− .0034	− .007	+15 36 24.14	−19.661	+ .093	+ .03	4	18.76
5312	BD− 2° 3580	F0	8.9		45 3.148	3.0876	+ .0061	− .0005	− 3 15 47.38	19.659	.095	− .023	4	17.51
5313	BD+55° 1555	A3	8.51	8.8	45 20.215	2.7020	− .0268	− .002	+54 41 3.04	19.654	.086	.00	4	18.51
5314	Brad 1711	A0	5.83	6.00	45 23.615	2.9330	− .0098	− .0071	+27 59 15.91	19.653	.092	+ .011	4	19.61
5315	BD+36° 2309	K0	*8.13*	7.8	45 25.966	2.8832	− .0140	− .001	+35 45 25.51	19.653	.091	− .01	4	18.74
5316	BD− 6° 3656	A0	7.62	7.77	12 45 34.331	+3.1025	+ .0077	.000	− 6 26 38.65	−19.650	+ .098	+ .03	4	19.06
5317	BD+ 2° 2585	G5	*8.11*	7.68	45 39.914	3.0651	+ .0036	− .0050	+ 1 38 17.85	19.649	.097	− .658	4	19.29
5318	BD+29° 2328	G0	9.56	9.20	45 50.394	2.9219	− .0106	− .0023	+29 35 39.25	19.646	.093	− .117	4	19.03
5319	BD−12° 3707	K2	7.56	7.64	46 17.537	3.1326	+ .0112	+ .0004	−12 35 56.35	19.638	.101	.000	4	19.01
5320	Lac 5296	A0	5.01		46 20.435	3.2508	+ .0260	− .0030	−33 33 47.67	19.637	.104	− .036	4	18.57
5321	BD+45° 2066		*9.83*		12 46 25.344	+2.7984	− .0200	− .006	+45 34 39.74	−19.635	+ .091	.00	4	18.75
5322	BD+61° 1324		*9.56*	9.5	46 39.15	2.5880	− .0313	− .002	+60 51 54.54	19.631	.085	.00	4	19.02
5323	BD− 4° 3365		10.0		46 39.628	3.0945	+ .0068	+ .0006	− 4 36 42.11	19.631	.100	− .033	4	18.85
5324	BD+ 4° 2662		*9.20*	8.95	46 54.096	3.0536	+ .0024	− .0008	+ 4 2 0.94	19.627	.099	+ .005	4	18.40
5325	BD+33° 2278	K0	8.8	8.68	47 12.289	2.8940	− .0124	− .003	+33 10 55.32	19.621	.095	− .02	4	18.66
5326	BD+11° 2503		*9.58*		12 47 25.792	+3.0202	− .0009	+ .001	+10 48 59.07	−19.617	+ .099	− .01	4	19.96
5327	BD+42° 2346		8.6	9.4	47 28.796	2.8224	− .0177	− .003	+42 19 11.43	19.617	.093	+ .02	5	20.05
5328	BD−18° 3483	K5	8.7	8.5	47 40.820	3.1651	+ .0148	− .0026	−18 30 31.27	19.613	.103	− .006	4	19.11
5329	31 Comae	G0	5.07	5.25	47 48.186	2.9257	− .0095	− .0012	+27 58 33.07	19.611	.097	− .026	4	18.53
5330	BD+78° 435	K0	8.77	8.9	47 49.33	1.7786	− .0165	− .0006	+77 55 32.81	19.610	.062	− .021	4	18.99
5331	BD+56° 1397	Ma	*7.58*	7.68	12 47 50.404	+2.6267	− .0287	− .005	+56 9 59.13	−19.610	+ .088	.00	4	19.21
5332	BD+83° 365	A3	*9.00*	9.3	48 4.13	0.8490	+ .1099	+ .0037	+82 51 54.73	19.606	.034	+ .015	5	19.23
5333	Brad 1716	K5	6.53	6.28	48 13.565	2.9846	− .0042	− .0007	+17 30 31.97	19.604	.100	− .021	4	19.22
5334	BD+ 1° 2765	K5	*9.29*	9.11	48 21.647	3.0695	+ .0042	− .0007	+ 0 39 50.89	19.601	.102	− .018	4	17.80
5335	32^1 H Camelop … n. pr.	A0	5.81	5.95	48 24.18	0.4716	+ .1934	− .0150	+83 51 9.73	19.600	.023	+ .014	8	19.76
5336	32^2 H Camelop … s. f.	A2	5.28		12 48 31.71	+0.4671	+ .1938	− .0180	+83 50 51.81	−19.597	+ .023	+ .015	105 82	20.72 20.43
5337	BD− 7° 3501	K2	8.6	8.8	48 36.055	3.1136	+ .0088	− .001	− 8 16 26.57	19.596	.105	− .01	4	19.17
5338	BD+24° 2505	K0	*9.69*	8.6	48 43.118	2.9464	− .0074	− .002	+24 8 21.40	19.594	.090	− .11	4	19.37
5339	BD+27° 2187	G0	7.66	8.0	49 9.098	2.9263	− .0000	− .0170	+27 13 51.16	19.586	.098	− .095	4	18.92
5340	CD−28° 9772 … br.	G5	7.75	7.99	49 34.077	3.2309	+ .0223	+ .0013	−28 52 28.54	19.578	.110	− .004	4	18.73

5296. $9^{m}4$–$9^{m}7$, 0″.3, 233°.

5335. $5^{m}28$, 22″, 147°.

5336. $5^{m}81$, 22″, 327°.

5340. $9^{m}5$, 3″.0, 32°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5341	Lal 24021 *br.*	A0	7.20	7.84	12 49 46.824	+3.1641	+0.0144	−0.0030	−17 36 12.92	−19.574	+0.107	+0.003	[illegible]	19.31
5342	Brad 1720	A3	6.34	6.19	49 48.860	3.0070	− .0018	+ .0040	+12 51 11.40	19.574	.103	− .033	4	18.09
5343	BD+ 7° 2588	G5	8.23	8.07	49 52.683	3.0363	+ .0010	− .0164	+ 7 11 41.58	19.572	.104	+ .083	4	19.08
5344	Wi (2) 12^h 950	K0	8.14	7.63	49 55.886	2.8615	− .0137	− .0017	+36 10 20.42	19.571	.098	− .082	4	19.22
5345	BD+25° 2571	K2	*8.15*	7.70	50 0.852	2.9374	− .0081	− .0021	+25 4 13.11	19.570	.102	− .004	4	19.04
5346	ψ Virginis	Mb	4.91	4.73	12 50 11.428	+3.1192	+ .0094	− .0016	− 9 6 16.41	−19.566	+ .107	− .021	[illegible]	19.85
5347	ε Urs Maj	A0	1.68		50 30.862	2.6331	− .0265	+ .0139	+56 23 37.76	19.560	.092	− .011	[illegible]	19.25
5348	CD−26° 9395	G5	9.8		50 36.467	3.2220	+ .0208	− .0055	−27 1 45.10	19.558	.111	− .047	5	19.75
5349	BD+72° 591	F5	*9.02*	8.97	50 51.51	2.1585	− .0317	+ .002	+72 9 52.92	19.554	.078	− .05	4	18.32
5350	BD+45° 2069		*9.44*		51 15.912	2.7706	− .0189	− .001	+45 32 33.67	19.546	.098	+ .04	4	19.22
5351	Wi (1) 12^h 818	K0	6.88	6.68	12 51 32.803	+3.0702	+ .0045	− .0015	+ 0 29 19.79	−19.540	+ .108	− .014	[illegible]	19.02
5352	δ Virginis	Ma	3.66	3.57	51 34.349	3.0527	+ .0028	− .0317	+ 3 49 55.07	19.540	.107	− .064	86 70	20.51 20.44
5353	Wi (1) 12^h 821	A0	6.10	6.3	51 40.721	3.1522	+ .0128	− .0025	−14 53 37.86	19.538	.111	+ .001	4	19.53
5354	BD− 0° 2631	G5	9.28	9.2	51 51.365	3.0748	+ .0049	+ .0002	− 0 23 28.85	19.534	.109	− .032	[illegible]	18.35
5355	BD+32° 2296	G5	6.93	6.87	51 54.634	2.8820	− .0114	− .0024	+32 26 4.02	19.533	.103	− .022	[illegible]	19.47
5356	BD−11° 3394	G0	10.0		12 51 56.321	+3.1341	+ .0109	+ .0035	−11 33 16.19	−19.532	+ .111	.000	[illegible]	21.04
5357	BD+26° 2407	■	*9.45*		52 11.599	2.9226	− .0083	− .0011	+26 27 17.02	19.528	.104	+ .024	4	19.23
5358	12 ² Can Ven *br.*	A0	2.90	3.27	52 17.230	2.8301	− .0148	− .0199	+38 45 0.75	19.526	.102	+ .045	10	20.20
5359	8 Draconis	F0	5.27	4.91	52 17.77	2.3978	− .0314	− .0005	+65 52 20.21	19.526	.087	− .035	4	18.75
5360	BD+21° 2470 *br.*	G0	*9.27*	9.5	52 36.921	2.9532	− .0057	+ .004	+21 26 55.54	19.519	.106	− .21	4	19.93
5361	BD−10° 3581	F0	8.73	8.6	12 52 47.343	+3.1290	+ .0102	− .0020	−10 26 58.50	−19.516	+ .113	− .022	[illegible]	19.49
5362	Brad 1726 *br.*	A2	6.00	6.00	52 47.484	2.6445	− .0245	− .0086	+54 31 56.00	19.516	.096	− .006	[illegible]	19.60
5363	Grmb 1938 *br.*	A0	6.95	6.88	52 57.116	2.7773	− .0178	− .0002	+43 59 4.95	19.513	.101	+ .006	[illegible]	19.22
5364	BD− 1° 2745	F8	9.67		53 28.418	3.0853	+ .0060	− .0015	− 2 19 40.00	19.502	.113	+ .012	4	18.20
5365	BD−20° 3749	A2	8.48	8.59	53 31.788	3.1880	+ .0164	− .0018	−20 26 8.32	19.501	.116	− .020	[illegible]	18.53
5366	BD+74° 515		*8.60*	8.90	12 54 6.44	+1.9480	− .0227	+ .0002	+74 28 7.16	−19.489	+ .075	− .020	4	19.06
5367	BD+18° 2681	K5	8.0	7.89	54 8.910	2.9699	− .0040	− .0006	+18 12 1.67	19.488	.110	− .039	[illegible]	19.00
5368	BD+34° 2372		*9.95*		54 11.075	2.8624	− .0119	+ .002	+33 53 43.99	19.488	.106	− .09	4	18.60
5369	BD−22° 3483	K0	8.7		54 17.752	3.2050	+ .0180	+ .0010	−22 52 19.15	19.485	.118	− .023	4	19.26
5370	Wi (1) 12^h 869	K0	7.70	7.35	54 27.066	3.1086	+ .0082	− .0007	− 6 30 58.80	19.482	.115	+ .002	4	19.04
5371	BD+13° 2610		9.5	8.9	12 54 31.921	+3.0010	− .0017	− .003	+12 49 36.65	−19.480	+ .111	− .01	4	18.94
5372	BD+53° 1582	K0	*9.77*		54 51.463	2.6490	− .0230	− .003	+53 12 55.98	19.474	.100	− .03	4 5	19.43 19.96
5373	BD+38° 2388		*9.7*		55 2.563	2.8252	− .0140	− .005	+37 54 0.11	19.470	.107	− .02	4	19.56
5374	BD+59° 1475	F5	*8.34*	8.01	55 3.546	2.5477	− .0265	+ .003	+58 48 20.62	19.469	.097	− .01	4	18.80
5375	BD+49° 2177	G5	*9.06*	9.2	55 12.655	2.7056	− .0204	− .005	+49 1 37.54	19.466	.103	.00	4	20.23
5376	BD−15° 3568	K2	8.5	7.81	12 55 13.015	+3.1648	+ .0138	− .0049	−16 6 7.65	−19.466	+ .118	+ .005	4	19.29
5377	Brad 1729	A0	5.87	5.81	55 32.122	3.0917	+ .0066	− .0019	− 3 22 50.06	19.460	.116	− .004	4	19.22
5378	BD+29° 2350	F5	*8.17*	8.05	55 42.435	2.8968	− .0090	− .0060	+28 40 13.31	19.456	.109	+ .019	[illegible]	19.56
5379	CD−24° 10657	K5	9.2	8.3	56 5.774	3.2210	+ .0194	− .0017	−24 36 14.72	19.448	.122	− .020	[illegible]	18.51
5380	BD+ 6° 2688	G0	9.0	8.69	56 11.252	3.0380	+ .0019	− .002	+ 6 6 21.57	19.446	.116	− .05	4	19.34
5381	BD+14° 2567	G5	7.84	8.26	12 56 22.754	+2.9899	− .0020	+ .001	+14 16 36.42	−19.442	+ .115	− .03	4	18.88
5382	Rad (45) 2950	K0	6.19	5.85	56 25.52	1.7757	− .0125	+ .0008	+75 54 13.31	19.441	.071	+ .001	9	20.13
5383	BD+20° 2784	K0	8.6	8.41	56 33.474	2.9535	− .0048	− .011	+20 3 51.71	19.438	.114	− .02	4	19.46
5384	Pi 12^h 244	G5	6.72	6.80	56 36.529	2.8669	− .0107	+ .0017	+32 12 37.76	19.437	.111	− .008	4	19.26
5385	BD+52° 1668	G5	*9.97*		57 8.904	2.6530	− .0216	− .008	+51 50 17.00	19.425	.103	+ .02	4	19.46
5386	CD−26° 9470	G0	8.2	8.02	12 57 9.234	+3.2403	+ .0212	− .0368	−26 56 22.36	−19.425	+ .125	− .232	4	20.00
5387	BD+46° 1836	K2	8.4	7.90	57 17.802	2.7258	− .0183	.000	+46 22 46.69	19.422	.107	− .01	5 4	20.98 19.97
5388	Brad 1736 *br.*	F0	4.89	5.40	57 18.032	2.5675	− .0245	+ .0120	+56 47 50.75	19.422	.101	− .023	[illegible]	19.84
5389	BD+42° 2364		*9.65*		57 18.209	2.7691	− .0162	+ .002	+42 33 42.34	19.422	.108	− .01	5	20.10
5390	BD+ 2° 2614	Ma	*7.63*	7.58	57 25.321	3.0614	+ .0040	+ .0009	+ 1 57 3.29	19.419	.119	− .016	4	18.94
5391	BD+10° 2501	F5	8.7	8.61	12 57 25.466	+3.0109	− .0002	− .006	+10 33 59.05	−19.419	+ .118	+ .03	4	19.25
5392	BD+ 7° 2602	F8	8.4	8.39	57 33.826	3.0293	+ .0014	.000	+ 7 26 33.34	19.416	.118	− .04	4	19.48
5393	BD+30° 2353		*9.73*		57 35.927	2.8804	− .0095	+ .0023	+30 3 25.00	19.415	.113	− .033	4	19.86
5394	ε Virginis	K0	2.95	3.14	58 11.657	3.0051	− .0005	− .0185	+11 23 19.85	19.403	.119	+ .017	66 55	19.92 20.04
5395	BD+16° 2450	K0	9.0	8.86	58 32.448	2.9729	− .0029	− .006	+16 28 19.34	19.395	.117	+ .02	4	18.54
5396	CD−25° 9571		10.3	ft.	12 58 37.816	+3.2327	+ .0200	+ .0004	−25 18 59.69	−19.393	+ .127	− .027	4	20.27
5397	BD+39° 2593	G5	9.02	9.3	58 38.865	2.7957	− .0143	+ .001	+39 18 41.26	19.392	.112	.00	7 6	21.82 21.27
5398	BD−19° 3625		10.0	ft.	58 44.349	3.1943	+ .0162	+ .0030	−19 45 2.39	19.390	.126	− .005	5	21.64
5399	BD+79° 410		*9.37*	9.1	58 46.22	1.2724	− .0321	− .0083	+79 20 16.30	19.390	.055	+ .053	4	20.02
5400	BD−18° 3533	F2	7.9	7.7	58 47.379	3.1871	+ .0154	− .0055	−18 38 49.33	19.389	.127	− .034	4	19.03

5341. 8^{m}2, 23″, 295°.
5357. F5, A7.
5358. 5^{m}39, 20″, 227°.
5360. 12^m, 2″3, 118°.
5362. 8^{m}0, 3″5, 284°.
5363. 12^{m}0, 7″0, 211°.
5388. 9^{m}6, <1″0, 86°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5401	BD+68° 705	F8	*8.52*	8.76	12 58 53.43	+2.2241	−0.0269	−0.0073	+68 11 21.91	−19.387	+0.091	+0.077	4	20.00
5402	Lal 24287	A0	6.87	6.68	59 5.595	2.9276	− .0060	− .0034	+23 4 3.81	19.383	.118	− .043	4	19.53
5403	BD− 7° 3533	F5	9.6		59 11.439	3.1199	+ .0092	.000	− 7 52 20.94	19.380	.124	− .01	4	19.80
5404	BD+24° 2530	G5	8.91	8.91	59 16.451	2.9163	− .0068	− .0026	+24 35 26.23	19.378	.117	+ .012	4	19.43
5405	BD+51° 1802	K0	8.18	7.98	59 23.119	2.6427	− .0208	+ .003	+51 28 8.42	19.376	.107	− .01	4	19.67
5406	48 Virginis *m.*	F0	6.51	7.1	12 59 46.993	+3.0922	+ .0067	− .0030	− 3 13 59.11	−19.367	+ .124	− .040	4	20.26
5407	BD+58° 1411	G	*8.78*	8.9	12 59 55.634	2.5253	− .0241	.000	+57 44 41.12	19.364	.103	.00	4	18.55
5408	BD+ 3° 2728	A2	*9.41*		13 0 7.152	3.0507	+ .0033	+ .0008	+ 3 38 12.18	19.359	.123	− .001	4	19.32
5409	BD+44° 2250	K5	9.02	8.73	0 32.187	2.7293	− .0167	− .028	+44 32 54.71	19.350	.112	+ .11	4	19.52
5410	BD+ 8° 2674	G0	*9.52*	9.5	0 49.658	3.0200	+ .0009	− .008	+ 8 32 50.26	19.344	.123	+ .01	4	18.77
5411	CD−27° 9017	F8	11.0	ft.	13 0 49.995	+3.2603	+ .0224	− .0030	−28 9 21.28	−19.343	+ .133	− .036	4	19.13
5412	BD+40° 2618	K0	7.82	7.65	0 57.661	2.7804	− .0142	− .0040	+39 45 7.96	19.340	.114	− .010	5	20.01
5413	BD+66° 787	G	*9.22*		1 7.55	2.2702	− .0258	+ .0028	+66 18 14.15	19.336	.096	− .029	4	19.76
5414	BD+32° 2318	K0	*8.55*	8.43	1 17.678	2.8481	− .0104	− .001	+32 27 16.24	19.333	.118	+ .03	4	18.06
5415	BD− 1° 2768	F0	8.5	8.04	1 20.461	3.0858	+ .0058	− .0026	− 2 7 43.88	19.331	.126	− .019	4	19.01
5416	BD−12° 3751	A3	8.7	8.72	13 1 22.216	+3.1502	+ .0118	− .0032	−12 21 36.86	−19.331	+ .129	+ .002	4	19.95
5417	BD− 9° 3617		9.2		1 30.575	3.1357	+ .0105	.000	−10 4 23.87	19.328	.129	.00	4	19.79
5418	BD+63° 1047		*9.65*		1 31.27	2.3814	− .0254	− .005	+62 51 27.57	19.327	.100	− .01	4	19.41
5419	Rad (90) 3403	K5	7.23	7.1	1 38.644	3.1592	+ .0126	− .0018	−13 40 59.45	19.324	.130	− .011	4	19.00
5420	BD+19° 2638	F8	8.3	8.14	1 47.773	2.9505	− .0039	− .002	+18 58 6.11	19.321	.123	− .08	4	19.29
5421	BD+65° 915 *m.*		*9.25*		13 1 57.51	+2.3065	− .0254	− .0098	+65 1 23.24	−19.317	+ .098	+ .036	4	19.97
5422	14 Can Ven	B9	5.11	5.40	2 0.061	2.8111	− .0121	− .0021	+36 13 36.03	19.316	.118	+ .010	5	20.49
5423	BD− 3° 3406	G0	8.5	8.39	2 5.906	3.0970	+ .0072	− .0079	− 3 52 51.48	19.314	.129	− .078	4	19.96
5424	BD+60° 1441		*10.22*		2 16.06	2.4445	− .0243	− .002	+60 16 47.14	19.310	.104	.00	4	19.78
5425	Grmb 1956 *br.*	K0	5.72	5.68	2 16.438	2.7052	− .0170	+ .0004	+45 41 45.77	19.310	.114	+ .029	4	20.23
5426	Lac 5400	A0	5.61		13 2 26.766	+3.3286	+ .0290	+ .0019	−35 25 56.55	−19.306	+ .138	− .099	4	19.69
5427	BD+15° 2545 *br.*	G5	*9.44*		2 56.473	2.9775	− .0019	− .003	+14 43 2.85	19.294	.126	+ .02	4	18.32
5428	Brad 1743	K5	4.90	5.00	3 20.443	2.8784	− .0080	+ .0019	+28 3 14.03	19.284	.123	− .085	4	17.76
5429	BD+ 4° 2693	G0	8.05	8.03	3 26.695	3.0448	+ .0031	− .0002	+ 4 21 57.44	19.282	.130	− .072	4	19.51
5430	BD+38° 2403	G5	8.10	8.5	3 32.839	2.7900	− .0127	− .0060	+37 41 37.67	19.279	.119	− .024	4	19.00
5431	BD+26° 2429	•	*10.02*		13 3 36.134	+2.8956	− .0069	− .001	+25 48 48.59	−19.278	+ .123	.00	4	19.44
5432	BD− 5° 3636	G0	9.1		3 51.800	3.1104	+ .0083	+ .001	− 5 51 5.65	19.272	.133	.00	4	19.07
5433	BD−15° 3599		10.0	ft.	3 52.182	3.1799	+ .0143	− .0018	−16 15 0.45	19.272	.136	− .015	4	19.53
5434	BD+20° 2796	F2	*8.02*	8.43	4 0.060	2.9360	− .0044	− .002	+20 21 40.98	19.269	.126	− .06	4	19.31
5435	BD+33° 2304	A5	*9.82*		4 6.555	2.8294	− .0105	.000	+33 24 3.58	19.266	.122	+ .01	4	19.21
5436	BD+75° 498	A3	8.72	9.1	13 4 19.17	+1.6736	− .0037	− .0070	+75 10 53.52	−19.261	+ .076	+ .011	4	18.61
5437	BD+70° 727		*9.10*	8.9	4 30.89	2.0224	− .0199	− .0004	+70 32 2.16	19.256	.090	− .017	4	19.03
5438	BD+64° 930 *br.*		*8.45*	8.66	4 36.21	2.3197	− .0239	− .006	+63 43 38.60	19.254	.102	.00	4	18.94
5439	BD+54° 1573	F5	*8.90*	8.58	4 42.988	2.5604	− .0207	+ .002	+53 59 12.38	19.251	.112	+ .05	4	18.62
5440	ψ Hydræ	K0	5.11	4.98	4 44.477	3.2285	+ .0185	− .0020	−22 41 26.33	19.251	.139	− .055	4	19.96
5441	W1 (1) 12^h 1063	G0	6.91	6.65	13 4 47.574	+3.0358	+ .0026	+ .0051	+ 5 38 56.09	−19.249	+ .131	− .689	4	19.25
5442	BD+45° 2088		*9.76*		5 1.464	2.6975	− .0162	− .004	+45 5 0.34	19.244	.119	− .01	5	19.98
5443	BD+ 1° 2792	G5	9.3	9.2	5 27.014	3.0650	+ .0048	− .0039	+ 1 10 7.36	19.233	.134	+ .032	4	19.30
5444	BD+23° 2542	K2	*9.62*		5 30.856	2.9154	− .0053	+ .0034	+22 39 12.22	19.232	.128	− .045	4	18.73
5445	BD+ 6° 2700	F0	*8.98*	8.45	5 34.794	3.0304	+ .0023	− .001	+ 6 24 22.21	19.230	.133	.00	4	19.69
5446	BD− 6° 3750	K0	7.38	7.43	13 5 36.563	+3.1206	+ .0091	− .002	− 7 13 43.76	−19.229	+ .136	+ .03	4	19.21
5447	BD−19° 3643	G0	10.0		5 37.085	3.2095	+ .0166	+ .0024	−19 54 58.13	19.229	.140	− .069	4	19.96
5448	6 Virginis *br.*	A0	4.46	4.50	5 48.362	3.1066	+ .0080	− .0026	− 5 6 43.93	19.224	.137	− .042	77 55	19.51 19.73
5449	W1 (2) 13^h 25	K0	6.18	6.11	5 51.863	2.9549	− .0028	− .0061	+17 16 29.85	19.223	.130	− .022	4	19.40
5450	BD+11° 2541		*9.67*		5 54.487	2.9991	+ .0001	− .004	+10 59 28.30	19.222	.132	− .03	4	19.72
5451	BD−17° 3783	G0	9.3		13 6 3.805	+3.1967	+ .0155	− .0016	−18 4 10.27	−19.218	+ .141	+ .005	4	20.25
5452	BD+13° 2638	A0	*9.07*	9.5	6 5.829	2.9867	− .0007	− .002	+12 44 46.55	19.217	.132	− .04	4	19.74
5453	BD+29° 2374	K0	*8.59*	8.70	6 8.426	2.8599	− .0083	+ .0005	+29 13 49.88	19.216	.127	− .020	4	19.78
5454	BD+43° 2303	G5	8.7	9.2	6 17.884	2.7175	− .0149	+ .005	+42 58 37.83	19.212	.121	− .09	4	19.14
5455	17 Can Ven *br.*	F0	6.05	6.10	6 22.897	2.7645	− .0129	− .0063	+38 55 26.00	19.210	.124	+ .028	4	18.98
5456	BD− 9° 3640	A0	8.1	8.00	13 6 38.976	+3.1380	+ .0105	− .0024	− 9 40 38.70	−19.203	+ .140	− .012	4	19.77
5457	BD+24° 2549	G5	*9.41*		6 39.800	2.9028	− .0059	.000	+23 54 52.96	19.203	.129	− .05	4	19.57
5458	Grmb 1965	A0	6.49	6.76	6 41.78	2.3307	− .0229	− .0053	+62 39 18.02	19.201	.106	− .015	4	19.05
5459	BD+ 2° 2637	F8	8.1	8.8	6 47.228	3.0583	+ .0043	+ .0020	+ 2 9 10.36	19.200	.136	− .097	4	19.12
5460	BD+53° 1604	G0	*9.17*	8.8	6 59.619	2.5643	− .0196	− .009	+52 51 38.73	19.195	.116	.00	4	19.37

5406. 7^{m}2-7^{m}4, 0$''$5, 218°.
5421. 9^{m}8-10^{m}0, 0$''$6, 228°.
5425. 12^m, 2$''$9, 118°.
5427. 12^{m}5, 1$''$4, 10°.
5431. G5, F8.
5438. 11^{m}5, 4$''$5, 310°.
5448. 9^{m}0, 7$''$1, 344°.
5455. 11^{m}0, 1$''$4, 279°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5461	CD−28° 9936		10.0	ft.	13 7 15.916	+3.2815	+0.0229	−0.0016	−28 22 8.44	−19.188	+0.146	0.000	4	19.29
5462	Lac 5428	A3	6.48	6.46	7 17.925	3.2624	+ .0212	− .0053	−26 7 35.86	19.187	.145	− .009	5 4	19.54 19.31
5463	BD−11° 3457	G5	8.7	8.81	7 49.087	3.1554	+ .0119	− .0002	−11 58 39.22	19.174	.143	− .020	4	18.00
5464	BD+15° 2552	G5	*9.48*		7 54.908	2.9673	− .0017	− .002	+15 7 18.36	19.171	.135	+ .02	4	18.79
5465	43 Comæ	G0	4.32	4.38	8 8.576	2.8621	− .0077	− .0604	+28 16 58.41	19.166	.130	+ .874	[illegible]	17.96
5466	BD+18° 2700	F8	7.7	7.06	13 8 27.461	+2.9454	− .0030	− .0405	+17 56 30.39	−19.157	+ .135	− .021	4	18.81
5467	BD− 1° 2785		9.3		8 49.200	3.0851	+ .0064	− .0121	− 1 47 41.59	19.148	.141	+ .011	4	19.18
5468	BD−22° 3534	K5	8.5	7.8	8 52.760	3.2366	+ .0185	− .0020	−22 30 31.27	19.147	.148	− .018	4	19.23
5469	BD+78° 453	A	*9.35*		9 8.86	1.1918	+ .0366	− .0170	+78 4 43.39	19.140	.060	− .022	4	18.00
5470	BD+35° 2423	A2	8.77	9.2	9 11.897	2.7975	− .0106	.000	+34 42 20.61	19.138	.129	− .01	4	18.98
5471	BD− 2° 3651	K2	7.32	6.96	13 9 13.596	+3.0940	+ .0071	− .0010	− 3 4 13.35	−19.138	+ .142	− .005	4	18.27
5472	BD+74° 526		*9.14*	8.9	9 16.58	1.6594	− .0019	− .0802	+74 16 46.33	19.136	.080	+ .067	5	19.99
5473	BD+59° 1493	G0	*8.42*	8.0	9 25.788	2.4125	− .0211	− .006	+58 52 21.20	19.132	.113	+ .02	4	18.70
5474	CD−29° 10202		9.8	ft.	9 37.304	3.3027	+ .0243	− .0049	−29 54 34.54	19.127	.152	− .012	4	20.09
5475	BD+47° 2031	G5	*8.58*	8.4	9 44.369	2.6446	− .0163	− .013	+46 55 5.64	19.124	.124	− .02	[illegible]	18.35
5476	BD−13° 3671	G0	7.68	7.62	13 9 55.758	+3.1718	+ .0130	− .0055	−13 51 30.81	−19.119	+ .147	.000	4	18.75
5477	BD+10° 2523	K0	*8.62*	8.44	10 3.392	3.0004	+ .0007	.000	+10 11 48.99	19.116	.140	+ .02	4	18.44
5478	BD+38° 2415		*9.84*		10 13.564	2.7557	− .0121	+ .003	+38 11 1.23	19.111	.129	+ .02	6	19.08
5479	BD+55° 1584	G5	*9.22*	8.9	10 19.118	2.4903	− .0196	.000	+55 16 41.47	19.109	.118	− .03	4	19.21
5480	CD−25° 9698	F2	9.15		11 8.419	3.2664	+ .0208	− .0075	−25 23 1.76	19.087	.153	− .020	4	18.19
5481	BD+22° 2561	G0	*9.01*	9.31	13 11 8.724	+2.9106	− .0045	− .005	+21 39 17.57	−19.087	+ .138	− .01	4	17.93
5482	Grmb 1974	A0	6.43	6.52	11 14.51	1.7169	− .0048	+ .0065	+73 13 21.97	19.084	.085	− .041	9	19.25
5483	BD+16° 2486	K2	7.56	7.48	11 22.713	2.9505	− .0021	− .004	+16 37 1.21	19.081	.140	+ .03	5 4	17.46 18.25
5484	BD+49° 2203		9.1	9.3	11 25.089	2.5910	− .0170	− .002	+49 37 4.91	19.080	.123	− .03	4	18.73
5485	BD− 4° 3450	F5	9.25		11 26.601	3.1101	+ .0083	+ .0033	− 5 12 39.83	19.079	.147	− .065	[illegible]	18.40
5486	BD+61° 1344	G5	*8.57*	8.79	13 11 28.41	+2.3277	− .0206	− .004	+61 10 16.61	−19.078	+ .112	+ .01	4	18.52
5487	BD−15° 3628	K0	8.8	8.54	11 32.707	3.1893	+ .0143	− .0054	−15 51 7.70	19.076	.151	+ .004	4	19.06
5488	CD−23° 10982	K0	9.6		11 35.517	3.2535	+ .0196	− .0072	−23 45 19.06	19.076	.154	− .160	4	22.23
5489	Grmb 1977	G5	6.32	6.23	11 41.32	0.5069	+ .1256	+ .0026	+80 53 40.42	19.073	.031	+ .006	8	18.57
5490	19 Can Ven	A5	5.68	5.90	11 56.325	2.7105	− .0132	− .0104	+41 16 38.60	19.066	.130	− .001	4	16.01
5491	BD+30° 2387		*9.60*		13 12 0.874	+2.8365	− .0080	− .0020	+29 46 10.70	−19.064	+ .135	+ .003	4	18.97
5492	r Centauri	K0	5.36	5.64	12 26.249	3.3231	+ .0255	+ .0021	−31 4 59.38	19.052	.159	− .064	4	19.24
5493	Lal 24645	A3	6.29	6.85	12 39.404	2.9193	− .0036	− .0088	+20 12 24.38	19.046	.141	+ .018	4	18.82
5494	Brad 1760	G0	5.22	5.44	12 48.262	3.0003	+ .0011	− .0226	+ 9 50 30.35	19.042	.144	+ .186	4	18.58
5495	BD+ 5° 2732	K0	7.6	7.82	12 49.908	3.0319	+ .0030	.000	+ 5 35 1.07	19.041	.146	.00	4	18.67
5496	BD+ 3° 2750		*9.39*	9.1	13 13 0.052	+3.0518	+ .0044	+ .0001	+ 2 51 45.99	−19.037	+ .148	− .009	4	18.97
5497	BD+66° 802		*9.23*		13 31.25	2.1021	− .0179	− .0023	+66 31 55.75	19.022	.105	+ .029	4	18.46
5498	Wi (1) 13h 160	F8	7.06	7.31	13 32.934	3.1343	+ .0101	.0000	− 8 18 38.50	19.022	.152	− .048	4	18.92
5499	σ Virginis	Ma	5.01	4.72	13 33.859	3.0292	+ .0030	− .0009	+ 5 53 27.54	19.021	.148	+ .009	4	18.81
5500	BD+33° 2320	F8	7.68	7.37	13 35.430	2.7997	− .0093	+ .011	+32 54 40.78	19.021	.136	− .08	4	18.96
5501	20 Can Ven	F0	4.66	5.21	13 13 57.415	+2.7044	− .0128	− .0111	+40 59 36.50	−19.010	+ .133	+ .004	8	21.60
5502	CD−27° 9145	G5	6.98	6.8	13 59.318	3.2973	+ .0228	− .0064	−27 54 34.71	19.010	.160	− .125	4	19.49
5503	BD− 8° 3527	K0	9.1	9.2	14 6.883	3.1412	+ .0105	− .002	− 9 9 19.90	19.006	.153	+ .02	4	19.21
5504	BD+50° 1992	K2	*7.90*	7.67	14 11.017	2.5629	− .0167	− .002	+50 10 52.32	19.004	.127	+ .04	4	19.15
5505	BD+52° 1689	K2	*9.30*		14 11.906	2.5320	− .0172	+ .003	+51 49 38.25	19.004	.125	− .06	4	18.35
5506	61 Virginis	G5	4.80	4.84	13 14 13.101	+3.2098	+ .0158	− .0754	−17 51 58.26	−19.003	+ .157	−1.085	4	18.50
5507	γ Hydræ	G5	3.33	3.37	14 34.101	3.2518	+ .0189	+ .0048	−22 44 59.18	18.993	.158	− .051	4	19.29
5508	BD+ 7° 2631	G5	8.4	8.02	14 41.283	3.0156	+ .0022	− .0140	+ 7 36 22.17	18.990	.147	+ .041	4	18.92
5509	BD−19° 3664	A0	8.3	7.65	14 46.042	3.2251	+ .0168	+ .0003	−19 34 58.39	18.988	.159	− .010	4	19.08
5510	Lal 24703	A0	6.56	6.90	14 47.906	3.0419	+ .0039	− .0033	+ 4 6 31.07	18.987	.150	− .027	4	18.51
5511	BD+ 1° 2803 *m.*	G0	*8.49*	8.35	13 14 49.302	+3.0658	+ .0053	− .0054	+ 0 55 38.29	−18.986	+ .152	− .046	4	18.99
5512	BD− 0° 2678	K0	8.7	8.68	14 52.278	3.0791	+ .0062	− .0068	− 0 50 52.18	18.985	.152	− .056	4	18.20
5513	BD+27° 2235	K2	*8.97*	8.85	14 58.176	2.8564	− .0064	+ .0034	+26 44 17.19	18.982	.141	− .038	4	18.85
5514	BD+72° 608	F8	*7.92*	7.72	15 17.20	1.7716	− .0066	− .0165	+71 39 59.84	18.973	.091	+ .044	4	18.21
5515	Wi (2) 13h 234	A5	5.96	6.22	15 23.567	2.7642	− .0102	− .0014	+35 32 52.35	18.970	.137	+ .015	4	18.28
5516	BD+23° 2560	F8	*8.45*	8.41	13 15 35.992	+2.8867	− .0047	− .004	+23 14 55.11	−18.964	+ .144	− .05	4	18.52
5517	BD+17° 2616	K	*9.50*	9.5	16 1.728	2.9390	− .0020	− .002	+17 4 52.78	18.952	.148	− .05	4	17.71
5518	BD+48° 2108 *m.*	K0	*8.57*	8.65	16 18.147	2.5843	− .0154	+ .011	+48 11 53.77	18.944	.131	− .04	4	18.78
5519	BD+56° 1650	K2	*9.42*	9.1	16 31.927	2.4143	− .0181	− .003	+56 22 2.24	18.938	.124	− .02	4	18.54
5520	BD− 2° 3671		9.2		16 34.407	3.0966	+ .0075	− .0015	− 3 6 51.33	18.937	.156	− .048	4	18.16

5511. $9^{m}1$-$9^{m}5$, $0''7$, 233°.

5518. $9^{m}1$-$9^{m}7$, $0''4$, 300°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5521	BD+32° 2342		*9.88*		13 16 42.980	+2.8013	−0.0083	+0.001	+31 43 41.83	−18.933	+0.142	+0.01	4	18.24
5522	23 Can Ven	K0	5.69	5.53	16 43.954	2.6968	−.0122	−.0051	+40 34 12.71	18.932	.137	−.020	4	18.25
5523	BD−21° 3701	F5	8.2	8.09	16 45.808	3.2447	+.0181	−.0052	−21 23 13.14	18.931	.164	+.006	4	18.53
5524	BD+64° 945		*8.62*	8.71	17 3.28	2.1693	−.0175	+.0006	+63 59 13.63	18.923	.112	−.015	4	18.77
5525	BD+11° 2555		*9.40*		17 15.362	2.9867	+.0008	−.004	+11 0 30.74	18.917	.152	−.03	4	18.54
5526	BD−10° 3660	K2	8.1	7.42	13 17 22.329	+3.1614	+.0119	−.0034	−11 19 40.08	−18.914	+.160	.000	4	18.75
5527	BD+54° 1588	K0	*8.87*	8.80	17 33.108	2.4558	−.0173	−.004	+54 16 43.08	18.908	.127	+.03	4	18.69
5528	BD+65° 927	A2	*8.68*	8.44	17 34.32	2.0979	−.0163	−.0027	+65 31 30.18	18.908	.110	+.007	4	19.02
5529	BD+13° 2660		*8.83*		18 10.894	2.9648	−.0003	+.002	+13 34 30.27	18.890	.153	−.06	4	18.85
5530	BD−14° 3707		10.2		18 44.013	3.1961	+.0142	−.0040	−15 19 33.48	18.874	.165	−.020	4	19.27
5531	BD+69° 697		*8.80*	9.25	13 18 48.19	+1.8912	−.0105	−.0002	+69 7 34.07	−18.872	+.101	−.004	4	19.29
5532	BD+28° 2221	K0	9.3	9.4	18 53.619	2.8297	−.0066	−.0015	+28 19 11.67	18.869	.147	+.024	4	18.98
5533	BD+60° 1459	F5	*9.50*		19 2.91	2.2828	−.0175	−.012	+60 13 46.89	18.865	.121	+.03	4	19.46
5534	BD+43° 2325	G5	9.5	9.4	19 9.484	2.6517	−.0128	−.002	+42 56 16.31	18.861	.139	−.01	4	19.49
5535	BD+37° 2402		*9.48*	9.3	19 13.159	2.7239	−.0105	+.006	+37 36 26.44	18.859	.142	.00	5	20.04
5536	BD−12° 3808	K2	8.7	8.14	13 19 25.639	+3.1794	+.0130	+.0014	−13 13 52.62	−18.853	+.161	−.016	4	19.45
5537	BD+10° 2542		*10.19*	ft.	19 31.402	2.9928	+.0014	−.001	+ 9 58 5.54	18.851	.156	.00	4	19.51
5538	Lal 24812 *br.*	K0	6.63	6.79	19 37.257	3.2429	+.0177	−.0035	−20 30 25.07	18.848	.169	−.014	4 3	18.85 17.11
5539	CD−24° 10882	K2	10.5	ft.	19 44.193	3.2827	+.0206	−.0010	−24 44 32.44	18.844	.171	−.006	4	20.32
5540	BD+14° 2607		*9.57*		19 46.753	2.9551	−.0006	+.002	+14 27 56.66	18.843	.155	+.06	4	19.07
5541	BD− 4° 3470	K0	8.3	8.52	13 19 47.095	+3.1104	+.0084	+.0010	− 4 43 53.16	−18.843	+.163	+.014	4	19.30
5542	BD+46° 1866		8.8	8.8	20 4.521	2.5977	−.0139	−.004	+46 4 49.04	18.834	.138	+.03	4	19.49
5543	BD+19° 2670	F8	*8.68*	8.58	20 36.200	+2.9133	−.0025	−.002	+19 6 1.06	18.818	+.154	−.04	4	18.72
5544	BD+85° 224		*9.07*	9.3	20 38.74	−2.633	+.951	+.011	+85 23 6.79	18.817	−.124	−.022	4	19.33
5545	CD−27° 9217	K5	8.6	8.0	20 39.520	+3.3200	+.0234	−.0003	−28 13 36.22	18.816	+.175	−.084	4	19.58
5546	ζ^1 Urs Maj *br.*	A2	2.40	3.1	13 20 42.440	+2.4060	−.0166	+.0148	+55 20 33.83	−18.815	+.129	−.030	4	19.48
5547	BD+25° 2630	F2	*9.34*	9.5	20 50.110	2.8571	−.0050	−.0006	+25 2 11.48	18.811	.152	−.021	4	19.41
5548	BD− 6° 3808	K2	9.3		20 50.924	3.1267	+.0094	.000	− 6 40 32.08	18.811	.165	+.03	4	19.98
5549	α Virginis	B2	1.21	1.24	20 58.560	3.1604	+.0117	−.0028	−10 44 39.03	18.807	.168	−.036	112 118	19.13 18.64
5550	CD−23° 11060	K0	10.0		20 59.950	3.2726	+.0196	−.0010	−23 22 16.60	18.806	.173	−.038	4	20.08
5551	BD+59° 1508	G5	*9.65*		13 21 29.151	+2.2865	−.0167	−.006	+59 23 19.98	−18.792	+.124	+.01	4	19.31
5552	BD+39° 2643		*9.78*		21 33.865	2.6911	−.0110	−.006	+39 20 21.84	18.789	.145	−.03	4	19.41
5553	BD−19° 3682	K5	8.3	7.88	21 35.869	3.2367	+.0169	−.0034	−19 23 58.65	18.788	.172	−.031	4	19.28
5554	BD+ 0° 3053	K0	*8.9*	9.23	21 38.940	3.0730	+.0061	−.0006	− 0 2 17.73	18.786	.164	+.016	4	19.73
5555	Wi (2) 13^h 352	K0	7.00	6.73	21 45.237	2.9391	−.0012	−.0050	+15 58 48.73	18.783	.157	−.015	4	19.57
5556	BD+79° 421	K2	*8.90*	8.9	13 21 52.79	+0.6766	+.0872	+.0013	+78 57 47.52	−18.780	+.043	+.007	4	20.02
5557	BD+ 3° 2772	K0	*8.81*	8.8	22 4.286	3.0456	+.0045	−.0011	+ 3 18 49.77	18.774	.164	−.008	4 5	19.86 20.54
5558	Wi (1) 13^h 295	A3	6.01	7.3	22 5.442	3.0791	+.0065	−.0080	− 0 46 36.52	18.773	.166	+.003	4	20.04
5559	BD+21° 2526	F8	8.47	8.36	22 18.980	2.8902	−.0033	+.002	+21 13 43.35	18.766	.157	−.04	4	19.57
5560	BD+35° 2449		*9.63*		22 22.541	2.7457	−.0090	+.002	+34 49 41.95	18.764	.149	+.01	4	19.62
5561	BD+ 6° 2740	K0	7.9	7.27	13 22 24.188	+3.0223	+.0032	−.008	+ 6 7 26.87	−18.764	+.163	+.03	4	19.54
5562	ι Virginis	K2	5.59	5.39	22 29.434	3.1753	+.0126	−.0092	−12 17 30.84	18.761	.171	−.022	4	20.25
5563	BD+57° 1438	G5	*7.42*	7.36	22 41.356	2.3354	−.0162	−.029	+57 23 9.06	18.755	.128	+.02	4	19.52
5564	BD+48° 2116		9.5		23 12.943	2.5485	−.0139	−.001	+47 50 22.92	18.738	.140	−.06	4	19.88
5565	BD−17° 3851	K0	8.7	8.12	23 17.580	3.2236	+.0159	+.0004	−17 37 5.15	18.736	.175	+.008	4	19.31
5566	BD+38° 2448		*9.44*		13 23 40.036	+2.6915	−.0103	+.001	+38 37 26.52	−18.724	+.148	.00	7	21.74
5567	BD+45° 2110	G5	8.22	8.03	24 0.023	2.5918	−.0128	+.006	+45 7 12.74	18.714	.143	+.07	4	19.22
5568	9 B Urs Min	K5	6.07	5.51	24 5.64	1.5233	+.0075	+.0056	+72 48 24.08	18.711	.088	−.017	8	19.74
5569	BD+ 8° 2713	K0	*9.09*	9.1	24 6.208	3.0048	+.0025	−.003	+ 8 3 48.82	18.710	.165	+.01	4	19.88
5570	BD+27° 2255	F5	*7.95*	7.90	24 9.494	2.8256	−.0057	+.0009	+27 15 21.64	18.709	.156	+.008	4	19.53
5571	BD− 8° 3562	K0	8.1	7.81	13 24 16.000	+3.1516	+.0110	−.001	− 9 19 47.48	−18.706	+.172	+.01	4	18.08
5572	BD−10° 3685	K2	9.84		24 22.136	3.1636	+.0117	+.0018	−10 41 54.99	18.702	.174	+.042	4	19.66
5573	70 Virginis	G0	5.16	5.41	24 31.009	2.9508	−.0003	−.0167	+14 12 20.77	18.697	.164	−.586	4	19.25
5574	BD+18° 2739	K2	*9.08*	8.7	24 31.070	2.9138	−.0022	−.003	+18 15 38.64	18.697	.160	−.03	4	19.05
5575	Lal 24941	K2	7.12	7.13	24 36.793	2.7765	−.0074	+.0002	+31 33 47.98	18.695	.154	+.007	4	19.00
5576	CD−29° 10367	K5	9.0		13 24 43.367	+3.3486	+.0248	−.0008	−29 44 47.30	−18.691	+.185	−.106	4	19.51
5577	Oelt 13654	F0	6.16	6.38	24 46.764	2.4278	−.0150	−.0111	+53 9 36.41	18.689	.136	−.012	4	18.56
5578	BD+43° 2336		*9.43*	9.3	25 8.746	2.6176	−.0119	−.003	+43 10 22.74	18.678	.146	+.02	4	19.47
5579	BD− 2° 3689	F5	9.23		25 10.677	+3.0943	+.0075	−.0010	− 2 32 50.06	18.677	+.171	+.019	4	18.83
5580	BD+84° 310		*8.42*	8.6	25 23.51	−1.4630	+.5145	.0000	+83 52 41.84	18.670	−.070	+.015	4	19.31

5538. 10ᵐ5, 3″9, 16°.

5546. 3ᵐ96, 14″, 149°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5581	69 H Urs Maj	A0	5.41	5.5	13 25 31.11	+2.2166	−0.0150	−0.0114	+60 21 31.58	−18.665	+0.126	+0.034	4	19.55
5582	BD− 4° 3494	G0	8.9	9.1	25 34.197	3.1110	+ .0084	− .0003	− 4 29 34.48	18.664	.173	− .008	4	18.46
5583	Wi (1) 13^{h} 365	K5	6.29	5.92	25 59.333	3.0074	+ .0028	+ .0002	+ 7 35 30.37	18.651	.168	+ .004	4	18.30
5584	BD+38° 2451		*8.89*	9.1	26 9.607	2.6892	− .0098	+ .001	+38 0 53.79	18.645	.151	− .01	4	19.23
5585	BD+16° 2519	A3	*8.72*	8.59	26 10.832	2.9345	− .0008	− .001	+15 43 39.21	18.644	.165	.00	4	18.77
5586	BD+34° 2428	F8	*8.54*	8.97	13 26 22.436	+2.7448	− .0082	− .005	+33 41 39.16	−18.637	+ .153	.00	4	18.46
5587	BD+71° 652		*8.85*	8.67	26 43.75	1.6439	+ .0018	− .0114	+70 56 15.86	18.627	.096	− .007	4	18.74
5588	BD+24° 2593	F2	7.51	7.75	27 4.625	2.8453	− .0044	+ .0003	+24 38 57.93	18.616	.162	+ .011	4	18.59
5589	Wi (2) 13^{h} 474	A5	7.15	7.38	27 15.094	2.8219	− .0053	+ .0037	+26 48 8.44	18.610	.161	+ .010	4	19.08
5590	BD+51° 1848	K2	*9.45*		27 42.399	2.4556	− .0139	+ .001	+51 2 27.32	18.595	.142	− .03	4	18.22
5591	73 Virginis	A3	5.93	5.85	13 27 43.763	+3.2379	+ .0165	− .0063	−18 19 0.38	−18.594	+ .185	− .023	4	19.39
5592	CD−25° 9857	K0	9.0	8.4	27 43.934	3.3118	+ .0216	− .0098	−25 35 41.21	18.594	.189	+ .088	4	19.35
5593	BD+11° 2580		*9.67*		27 45.804	2.9702	+ .0011	− .002	+11 36 14.40	18.593	.169	.00	4	19.52
5594	BD+42° 2405	K0	6.15	5.90	27 47.608	2.6147	− .0113	− .0084	+42 31 2.39	18.592	.150	+ .019	4	19.54
5595	CD−23° 11116	K2	9.5		27 49.956	3.2893	+ .0200	− .0050	−23 26 3.60	18.591	.188	− .042	4	19.84
5596	BD+19° 2682	K0	*7.80*	7.88	13 27 50.516	+2.8969	− .0022	− .0030	+19 22 44.20	−18.591	+ .166	− .045	4	19.75
5597	BD+ 9° 2773	F8	7.9	8.34	27 58.999	2.9900	+ .0020	− .002	+ 9 23 17.34	18.586	.171	+ .04	4	19.77
5598	BD−20° 3841	G5	9.8		28 2.588	3.2653	+ .0183	− .0040	−21 2 7.44	18.584	.187	− .026	4	19.98
5599	BD−18° 3626	K2	9.8		28 4.668	3.2439	+ .0168	− .0056	−18 51 40.59	18.583	.186	− .019	4	20.32
5600	Lac 5580	A0	5.67	5.4	28 8.249	3.3424	+ .0238	− .0083	−28 16 51.47	18.581	.191	− .021	4	20.21
5601	BD+53° 1629	G0	*9.93*		13 28 14.631	+2.3982	− .0140	.000	+53 20 49.73	−18.578	+ .140	+ .02	5	19.16
5602	BD+82° 395	A5	*8.70*	8.4	28 17.17	−0.3605	+ .2415	+ .0014	+81 40 39.66	18.576	− .012	+ .031	4	19.23
5603	BD−14° 3739	K0	5.65	5.41	28 34.971	+3.2072	+ .0144	− .0045	−14 57 7.17	18.566	+ .186	− .011	4	19.98
5604	BD+15° 2591	F0	7.08	7.04	28 41.584	2.9394	− .0002	− .0070	+14 48 17.26	18.563	.169	+ .058	4	18.75
5605	Brad 1786	G5	5.43	5.38	28 45.100	3.1595	+ .0114	− .0020	− 9 45 11.56	18.561	.183	− .044	4	20.19
5606	BD+35° 2460	G0	*8.22*	8.25	13 28 45.754	+2.7154	− .0085	+ .002	+35 17 59.18	−18.560	+ .158	.00	4	19.58
5607	BD+28° 2236	G0	*9.32*	9.2	28 58.128	2.7996	− .0058	− .0028	+28 22 11.82	18.554	.162	− .050	4	19.82
5608	BD− 6° 3840		9.6	9.3	29 39.472	3.1341	+ .0099	.000	− 6 52 26.55	18.531	.182	+ .04	4	19.86
5609	BD+57° 1446	K0	*8.80*	8.8	29 44.765	2.2904	− .0140	.000	+56 53 48.80	18.528	.135	− .02	4	19.34
5610	BD+30° 2419	K0	8.77	8.80	29 49.992	2.7712	− .0065	+ .0045	+30 33 59.56	18.525	.162	+ .085	4	20.28
5611	BD+ 2° 2692		*9.67*		13 29 50.260	+3.0526	+ .0054	+ .0019	+ 2 15 35.67	−18.525	+ .178	+ .006	4	20.04
5612	BD+23° 2585	G0	8.9	8.76	29 59.228	2.8545	− .0036	− .0030	+23 6 21.86	18.520	.167	.000	4	18.81
5613	BD−16° 3697	F5	8.8	7.9	30 7.370	3.2287	+ .0156	− .0044	−16 56 26.99	18.515	.189	− .012	4	19.52
5614	BD+75° 509	G5	8.87	8.83	30 14.36	1.1876	+ .0303	− .0170	+74 46 54.04	18.511	.074	− .032	4	19.95
5615	BD+ 6° 2761	A0	8.5	9.2	30 22.296	3.0188	+ .0037	− .004	+ 5 59 32.37	18.507	.177	− .03	4	19.27
5616	BD+46° 1880	F0	7.53	7.4	13 30 28.260	+2.5404	− .0120	+ .006	+46 0 32.25	−18.504	+ .150	+ .06	4	20.09
5617	ζ Virginis	A2	3.44	3.58	30 36.900	3.0744	+ .0066	− .0191	− 0 11 14.52	18.498	.181	+ .034	65 51	19.98 20.00
5618	BD+42° 2413	K0	9.2	9.23	30 41.245	2.6141	− .0105	− .004	+41 40 46.98	18.496	.154	+ .01	5	20.52
5619	81 Urs Maj	A0	5.48	5.65	31 2.844	2.3131	− .0137	− .0020	+55 45 29.16	18.484	.138	− .010	4	20.30
5620	Brad 1791	A3	4.63	5.0	31 11.219	2.4681	− .0128	− .0120	+49 25 28.97	18.479	.147	+ .015	4	19.75
5621	CD−28° 10159	F2	8.2	8.36	13 31 11.588	+3.3594	+ .0245	.0000	−28 58 8.43	−18.479	+ .198	+ .035	4	20.34
5622	BD+12° 2605	K5	*8.04*	9.14	31 13.303	2.9591	+ .0009	− .004	+12 22 35.39	18.478	.176	− .04	4	19.83
5623	17 H Can Ven	F0	4.96	5.45	31 13.508	2.6739	− .0090	+ .0070	+37 35 30.77	18.478	.159	− .019	4	20.13
5624	BD−10° 3712	F8	8.81	8.7	31 15.208	3.1687	+ .0119	− .0030	−10 29 30.84	18.477	.187	− .032	4	19.27
5625	BD+73° 595	K0	*8.52*	8.63	31 17.45	1.3270	+ .0198	− .0035	+73 27 45.34	18.476	.083	− .008	4	20.28
5626	BD+63° 1078		*9.75*		13 31 18.08	+2.0582	− .0114	− .006	+62 55 59.89	−18.475	+ .124	+ .03	4	19.81
5627	BD+21° 2549	K5	8.8	8.78	31 28.124	2.8732	− .0026	− .001	+21 0 57.34	18.470	.171	+ .02	4	19.48
5628	Grmb 2017	A5	6.63	7.27	31 49.824	2.5586	− .0113	− .0020	+44 36 20.29	18.458	.153	+ .012	4	20.24
5629	BD− 0° 2710	F8	7.04	6.6	32 9.396	3.0775	+ .0068	− .0151	− 0 31 17.23	18.446	.183	− .054	4	19.01
5630	BD− 2° 3711	F0	8.9	7.99	32 10.849	3.0958	+ .0078	− .0009	− 2 31 49.84	18.446	.184	− .013	4	19.22
5631	CD−24° 10993	G5	10.0		13 32 28.304	+3.3104	+ .0208	− .0005	−24 23 28.96	−18.435	+ .197	− .030	4	19.59
5632	BD+14° 2638		8.9		32 31.893	2.9398	+ .0002	.000	+14 12 29.15	18.433	.176	− .01	4	19.53
5633	BD+76° 492	A0	7.64	7.91	32 54.07	0.9262	+ .0519	− .0014	+76 12 23.24	18.421	.061	− .029	4	18.04
5634	BD+ 0° 3082	A5	*8.94*	8.98	33 24.387	3.0710	+ .0065	− .0005	+ 0 11 8.57	18.403	.186	− .008	4	19.28
5635	Wi (1) 13^{h} 515 *s. f.*	K0	6.93	6.77	33 40.140	3.0468	+ .0053	− .0015	+ 2 47 23.39	18.394	.184	− .029	4	18.82
5636	BD−14° 3760	F8	8.3	8.07	13 33 40.146	+3.2140	+ .0144	+ .0048	−14 53 48.64	−18.394	+ .194	− .026	4	18.65
5637	BD+67° 788		*9.50*		33 49.21	1.7928	− .0039	− .0035	+67 26 2.13	18.389	.112	− .010	4 3	18.85 19.71
5638	25 Can Ven *br.*	F0	4.99	5.46	33 54.419	2.6759	− .0084	− .0086	+36 42 5.41	18.386	.163	+ .014	10	20.48
5639	BD+60° 1476	K2	*8.10*	8.43	33 58.13	2.1459	− .0119	− .001	+60 6 35.90	18.384	.133	+ .01	4	19.05
5640	BD+27° 2273	G5	*8.45*	8.60	34 9.417	2.7983	− .0048	+ .0004	+27 12 45.40	18.377	.171	− .003	4	19.34

5635. $8^{m}7$, 16″, 32°.

5638. $8^{m}0$, 1″4, 121°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5641	BD−12° 3856	F5	8.5	7.79	13 34 11.504	+3.1974	+0.0135	+0.0005	−13 8 57.18	−18.376	+0.194	−0.007	4	19.56
5642	Wi (2) 13ʰ 620	G5	7.05	6.41	34 14.051	2.8467	− .0032	− .0100	+22 56 10.22	18.374	.174	− .084	4	19.77
5643	BD+48° 2138 *m.*		*9.73*		34 36.198	2.4657	− .0119	− .021	+48 32 52.98	18.361	.152	− .12	4	19.34
5644	BD+51° 1858	G5	*8.02*	7.93	34 52.162	2.4002	− .0123	.000	+51 21 59.17	18.352	.149	+ .03	4	19.29
5645	BD+22° 2613	K0	*9.62*		35 14.575	2.8543	− .0028	− .0016	+22 2 41.19	18.339	.176	− .006	4	18.04
5646	13 B Urs Min	K0	5.67	5.59	13 35 15.53	+1.4460	+ .0122	− .0080	+71 38 56.70	−18.338	+ .093	− .007	9	20.28
5647	CD−26° 9852	A3	8.4		35 24.711	3.3450	+ .0228	− .0048	−26 44 44.52	18.332	.205	− .036	4	19.45
5648	BD− 4° 3531		10.0		35 26.504	3.1161	+ .0089	− .0064	− 4 35 20.93	18.332	.192	+ .022	4	19.52
5649	BD+ 1° 2836	F8	*8.34*	8.33	35 29.916	3.0586	+ .0060	− .0068	+ 1 29 42.73	18.330	.188	− .065	4	18.99
5650	BD+30° 2432		*9.24*	9.47	35 31.487	2.7548	− .0059	− .0017	+30 26 14.93	18.329	.170	+ .001	4	20.02
5651	Pulk (55) 2035 *m.*	F2	5.54	5.77	13 35 37.846	+2.9659	+ .0017	− .0076	+11 9 7.83	−18.325	+ .183	− .011	4	19.93
5652	Lal 25213	K2	6.86	7.06	35 39.734	3.2285	+ .0152	− .0011	−16 2 27.17	18.324	.198	+ .016	4	19.36
5653	BD+40° 2674		8.9		36 7.332	2.6082	− .0093	+ .005	+40 29 2.07	18.308	.163	.00	4	19.50
5654	BD+ 4° 2772		*9.41*		36 21.305	3.0353	+ .0048	+ .0014	+ 3 55 5.22	18.300	.189	− .024	4	19.82
5655	BD− 7° 3671	K5	8.9		36 22.886	3.1517	+ .0108	− .003	− 8 14 18.68	18.299	.195	+ .04	4	18.98
5656	BD+68° 735	F8	*8.55*	8.0	13 36 29.07	+1.6856	+ .0006	+ .0005	+68 30 34.34	−18.295	+ .108	+ .019	4	19.74
5657	BD+70° 750		*9.22*	8.0	36 29.43	1.5910	+ .0048	+ .0027	+69 46 2.28	18.295	.103	− .004	4	19.49
5658	BD+ 7° 2679	F0	9.0	8.9	36 34.731	3.0060	+ .0035	− .004	+ 6 57 10.03	18.291	.187	+ .03	4	20.21
5659	BD+37° 2438		*8.97*	9.27	36 43.852	2.6540	− .0082	+ .003	+37 24 31.17	18.286	.166	− .05	5	20.23
5660	BD+58° 1460	K0	*10.02*		36 55.292	2.1976	− .0116	− .003	+57 55 29.25	18.279	.139	− .03	4	19.61
5661	BD+ 9° 2796	A2	8.7	8.36	13 36 58.803	+2.9810	+ .0025	− .002	+ 9 29 10.94	−18.277	+ .186	+ .02	4	19.98
5662	Pi 13ʰ 159	A0	6.42	6.47	37 5.721	3.3064	+ .0199	− .0008	−23 2 44.15	18.273	.206	− .003	4	19.54
5663	BD+16° 2539	K0	*8.28*	8.03	37 17.267	2.9114	− .0003	.000	+16 19 59.95	18.266	.183	+ .01	4	19.53
5664	BD−18° 3660	Mb	Var.	8.3	37 22.946	3.2595	+ .0169	− .0030	−18 43 56.51	18.263	.203	− .009	4	19.23
5665	BD+34° 2439	K0	*8.26*	8.50	37 24.066	2.7037	− .0069	.000	+33 48 41.14	18.262	.170	− .04	4	19.58
5666	*m* Virginis	Ma	5.16	4.85	13 37 24.640	+3.1531	+ .0109	− .0069	− 8 17 59.33	−18.261	+ .198	+ .036	72 56	19.18 19.13
5667	Brad 1802	Ma	4.75	5.11	37 42.333	2.2810	− .0118	− .0029	+55 5 10.15	18.251	.145	− .013	4	19.39
5668	CD−29° 10536		9.0	8.3	37 45.904	3.3832	+ .0249	− .0031	−29 19 0.06	18.249	.211	− .044	4	20.55
5669	BD+19° 2704		8.9	9.1	37 49.219	2.8751	− .0017	− .001	+19 39 29.61	18.247	.181	+ .01	4	19.02
5670	BD− 6° 3870	K0	8.5	8.43	37 50.997	3.1364	+ .0100	− .001	− 6 33 55.40	18.246	.197	+ .04	4	18.82
5671	BD+47° 2062		9.7	8.8	13 38 26.500	+2.4733	− .0108	+ .002	+47 7 24.19	−18.224	+ .158	.00	4	18.98
5672	BD− 0° 2727	K0	8.1	7.36	38 51.058	3.0806	+ .0072	.0000	− 0 48 18.19	18.209	.196	+ .006	4	19.46
5673	BD+28° 2252	K2	*9.52*		38 53.176	2.7796	− .0046	− .0010	+27 40 26.61	18.208	.177	+ .010	4	19.04
5674	BD+43° 2347		*9.74*		38 56.436	2.5392	− .0099	.000	+43 39 21.21	18.206	.163	+ .02	4	19.58
5675	Pi 13ʰ 184	A0	5.70	5.91	39 0.52	1.8604	− .0052	+ .0095	+65 13 33.69	18.204	.121	− .013	4	19.66
5676	Wi (2) 13ʰ 749	K0	5.98	6.22	13 39 9.517	+2.6746	− .0073	+ .0016	+35 23 30.01	−18.198	+ .172	+ .001	7	21.82
5677	BD+13° 2702		*9.47*		39 10.906	2.9424	+ .0012	− .002	+13 5 17.09	18.197	.188	+ .01	4	19.32
5678	BD−20° 3870	F8	8.7		39 21.524	3.2861	+ .0185	− .0060	−20 48 36.82	18.191	.208	− .006	4	20.00
5679	BD+25° 2666	G0	*8.97*	9.15	39 31.718	2.8133	− .0034	− .0030	+24 45 45.03	18.185	.180	− .032	4	18.76
5680	BD+77° 518		*8.92*		39 43.10	0.5821	+ .0823	.0000	+77 15 23.90	18.177	.044	− .012	4	19.55
5681	Pi 13ʰ 174	A0	6.47	[illegible]	13 39 44.356	+3.1230	+ .0093	− .0032	− 5 5 47.34	−18.177	+ .199	− .026	4	19.43
5682	BD+50° 2021	K0	7.40	7.40	39 47.535	2.3906	− .0110	+ .001	+50 25 47.41	18.175	.155	− .03	4	19.04
5683	BD+18° 2773	K0	*8.15*	7.73	39 57.785	2.8913	− .0007	− .006	+17 48 36.70	18.169	.186	− .03	4	17.79
5684	CD−25° 9967	K0	10.3		39 59.001	3.3472	+ .0222	− .0033	−25 55 20.89	18.168	.214	− .042	4	19.55
5685	83 Virginis	G0	5.71	5.58	40 10.648	3.2325	+ .0152	+ .0005	−15 46 37.72	18.161	.207	− .005	5	20.53
5686	BD−10° 3745	A5	9.46		13 40 31.074	+3.1769	+ .0121	− .0007	−10 24 1.57	−18.148	+ .203	+ .016	4	19.48
5687	BD+29° 2454	G5	*8.13*	8.40	40 50.386	2.7523	− .0050	− .0005	+29 22 42.73	18.136	.179	− .003	4 5	18.57 17.74
5688	BD−14° 3792	Ma	7.76	7.22	40 50.839	3.2185	+ .0144	+ .0004	−14 21 55.99	18.136	.207	− .001	4	18.79
5689	BD+42° 2431	G5	8.9	9.2	40 54.425	2.5578	− .0091	− .002	+42 7 1.45	18.134	.167	+ .01	4	19.28
5690	BD+54° 1619	G0	*8.90*	8.8	41 4.467	2.2804	− .0109	− .014	+54 14 46.67	18.127	.150	− .05	4	19.08
5691	*i* Centauri	F5	4.36		13 41 8.175	+3.4383	+ .0281	− .0368	−32 38 22.82	−18.125	+ .222	− .153	4	19.61
5692	BD+22° 2626	K0	*9.06*	8.71	41 36.202	2.8389	− .0024	− .003	+22 11 16.62	18.107	.185	+ .04	4	18.07
5693	Brad 1805 *br*	K0	5.85	5.32	41 40.349	3.1949	+ .0130	− .0016	−12 1 33.99	18.105	.207	.000	4	18.43
5694	BD+ 1° 2845	F5	9.04	9.2	42 2.108	3.0052	+ .0066	− .0034	+ 0 44 54.32	18.091	.200	− .003	4	18.22
5695	BD+56° 1683	F5	[illegible]	6.65	42 15.831	2.2084	− .0104	+ .0117	+56 17 16.84	18.083	.146	− .359	4	19.06
5696	Lac 5676	A0	5.24		13 42 16.245	+3.4895	+ .0315	− .0018	−35 51 6.92	−18.082	+ .227	− .014	4	19.78
5697	BD+36° 2408		9.2	8.8	42 56.461	2.6517	− .0070	+ .001	+35 57 36.69	18.057	.176	+ .03	4	18.88
5698	Brad 1808	F5	5.91	5.86	43 0.133	2.7882	− .0037	− .0014	+26 6 11.50	18.054	.185	− .067	4	18.29
5699	BD+48° 2151	K0	*8.45*	8.05	43 3.778	2.4168	− .0102	− .002	+48 28 15.46	18.052	.161	+ .05	4	19.30
5700	BD+71° 665		*9.42*		43 7.12	1.3666	+ .0163	− .0170	+71 11 20.25	18.050	.094	+ .016	4	18.98

5643. 10m3–10m5, 2″5, 275°.

5651. 6m3–6m4, 0″3, 23 yrs.

5693. 10m, 1″6, 208°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5701	BD+11° 2601	K5	8.5	7.91	13 43 25.160	+2.9559	+0.0021	−0.002	+11 20 12.77	−18.039	+0.196	+0.02	4	18.56
5702	τ Bootis *br.*	F5	4.51	4.53	43 27.595	2.8849	− .0005	− .0340	+17 51 18.21	18.037	.191	+ .026	117 94	20.18 20.46
5703	BD− 3° 3533	K0	9.8		43 37.000	3.1093	+ .0087	− .0022	− 3 35 24.79	18.031	.206	− .019	4	19.49
5704	BD+ 5° 2800		9.2	9.3	44 1.670	3.0191	+ .0046	− .0017	+ 5 13 39.28	18.015	.201	− .009	5	18.87
5705	BD+32° 2389	K0	*9.00*	8.8	44 18.574	2.6981	− .0058	.000	+32 31 23.17	18.005	.180	+ .02	4	18.54
5706	η Urs Maj	B3	1.91		13 44 23.383	+2.3792	− .0101	− .0121	+49 42 43.91	−18.001	+ .160	− .021	4	18.98
5707	BD−16° 3747	K0	8.8	8.5	44 30.644	+3.2480	+ .0158	.0000	−16 34 55.75	17.997	+ .216	− .067	4	18.12
5708	Grmb 2063	G5	6.16	5.80	44 32.88	−1.8306	+ .4982	+ .0218	+83 9 14.58	17.995	− .109	− .047	8	18.76
5709	BD+61° 1377 *br.*	K0	*8.47*	8.46	44 43.87	+2.0050	− .0073	− .002	+61 5 23.61	17.988	+ .137	.00	4	18.43
5710	CD−24° 11105	Ma	8.2	8.0	45 19.943	3.3486	+ .0216	− .0009	−24 57 21.01	17.965	.224	− .010	4	18.55
5711	BD+ 7° 2701	A0	6.75	6.67	13 45 29.132	+3.0025	+ .0039	− .005	+ 6 44 30.55	−17.959	+ .202	− .02	4	18.50
5712	89 Virginis	K0	5.11	5.07	45 31.293	3.2626	+ .0165	− .0069	−17 44 9.76	17.958	.219	− .043	4	18.14
5713	Lac 5695	B9	6.10	6.26	45 34.176	3.3977	+ .0246	− .0053	−28 41 0.97	17.956	.228	− .036	4	18.83
5714	Wi (1) 13ʰ 732	A0	6.54	6.8	45 45.703	2.9805	+ .0032	− .0027	+ 8 48 19.75	17.948	.201	− .018	4	18.42
5715	BD−18° 3689	F5	9.1	8.8	45 45.984	3.2770	+ .0173	− .0033	−18 57 19.26	17.948	.220	− .008	4	19.02
5716	BD+35° 2488	F8	9.02		13 45 47.390	+2.6596	− .0063	.000	+34 45 46.49	−17.947	+ .180	+ .01	4	18.60
5717	BD+50° 2029	G5	8.22	8.0	46 6.090	2.3665	− .0098	− .006	+49 47 59.71	17.935	.161	− .04	4	18.80
5718	Wi (2) 13ʰ 917	F0	6.72	6.88	46 17.132	2.8666	− .0008	− .0035	+19 1 34.68	17.928	.195	− .024	4	18.76
5719	BD+45° 2133		*9.95*		46 20.104	2.4811	− .0089	− .010	+44 41 36.98	17.926	.169	+ .10	4	19.03
5720	BD+ 3° 2819	K5	8.7	9.2	46 22.836	3.0423	+ .0057	− .0024	+ 2 54 34.19	17.924	.206	− .018	4	19.14
5721	BD+30° 2451	K	8.91	8.4	13 46 26.183	+2.7316	− .0047	− .0002	+29 40 34.53	−17.922	+ .186	+ .027	4	19.52
5722	BD−20° 3900	A5	8.7		46 30.463	3.3027	+ .0188	− .0060	−21 0 32.51	17.919	.223	− .084	4	19.83
5723	BD− 7° 3712	K0	7.05	6.90	46 38.386	3.1504	+ .0107	+ .001	− 7 23 15.60	17.914	.214	+ .05	4	18.86
5724	BD+27° 2299	G0	*8.89*	8.68	46 42.302	2.7712	− .0036	− .0005	+26 41 7.28	17.912	.188	− .010	4	19.58
5725	BD− 9° 3790		10.0		47 5.896	3.1787	+ .0121	.000	− 9 58 59.04	17.896	.217	− .06	4 5	19.26 18.88
5726	Grmb 2055	K0	6.05	6.16	13 47 9.30	+1.9453	− .0057	+ .0101	+61 53 16.42	−17.894	+ .136	− .099	5	21.26
5727	BD+20° 2885	G	*9.47*	9.3	47 50.134	2.8454	− .0013	− .004	+20 33 55.32	17.867	.195	.00	4	19.31
5728	BD+12° 2634	F5	6.76	6.8	47 56.498	2.9401	+ .0019	− .012	+12 19 54.41	17.863	.202	+ .04	4	18.81
5729	BD+59° 1534	F2	*9.80*		48 10.334	2.0404	− .0072	+ .005	+59 31 12.72	17.854	.142	− .05	4	19.55
5730	BD−22° 3674	G0	9.1		48 16.023	3.3263	+ .0199	− .0037	−22 38 32.24	17.850	.229	− .013	4	19.75
5731	Wi (2) 13ʰ 988	Mb	7.82	7.42	13 48 22.398	+2.5608	− .0076	+ .0007	+40 3 53.58	−17.845	+ .177	− .042	4	19.56
5732	BD+31° 2556		*9.37*	9.1	48 38.951	2.7015	− .0050	− .0021	+31 19 12.23	17.835	.186	+ .016	4	18.68
5733	BD+17° 2676	K5	6.78	6.48	48 41.895	2.8847	+ .0001	− .0001	+17 7 26.50	17.833	.200	− .014	4	19.18
5734	BD+39° 2691		*9.00*	9.3	48 46.620	2.5744	− .0073	.000	+39 12 52.08	17.829	.179	− .08	4	19.82
5735	BD+15° 2639		*9.72*		49 0.042	2.9053	+ .0007	+ .003	+15 17 33.41	17.820	.202	.00	4	19.54
5736	*i* Draconis	Ma	4.77	4.94	13 49 5.69	+1.7524	− .0003	+ .0004	+65 7 5.44	−17.817	+ .125	− .003	4	19.21
5737	BD+ 8° 2779		*9.83*		49 10.944	2.9831	+ .0037	− .002	+ 8 19 0.93	17.813	.207	+ .02	4	19.79
5738	BD+55° 1640	K0	*9.67*		49 17.822	2.1829	− .0086	+ .003	+55 25 9.83	17.808	.154	− .01	4	19.50
5739	BD−11° 3623	F8	8.6	9.2	49 28.214	3.2024	+ .0131	− .0026	−11 55 14.87	17.802	.222	+ .001	4	19.69
5740	BD+24° 2659	K2	*9.19*	8.8	49 43.755	2.7917	− .0026	+ .0032	+24 31 51.27	17.791	.194	− .012	4	19.01
5741	BD+13° 2723	F8	*8.72*	8.49	13 49 49.844	+2.9296	+ .0017	+ .002	+13 4 29.83	−17.786	+ .205	− .05	4	18.96
5742	BD− 1° 2874	F8	8.5	8.83	50 0.216	3.0896	+ .0080	− .0060	− 1 34 16.53	17.780	.216	− .054	4	18.80
5743	BD+38° 2487		*9.51*	9.5	50 28.940	2.5837	− .0069	.000	+38 16 56.57	17.761	.182	+ .06	4	19.05
5744	BD+51° 1877	F8	*8.95*	8.9	50 38.064	2.2911	− .0088	− .003	+51 33 51.43	17.754	.163	+ .05	4	19.76
5745	CD−25° 10071	Mb	7.8	7.88	50 48.718	3.3762	+ .0226	− .0038	−26 2 19.20	17.747	.237	− .080	4	19.10
5746	BD+42° 2450	F8	8.2	8.52	13 50 50.314	+2.5145	− .0077	− .0047	+41 56 9.46	−17.746	+ .178	+ .021	4	19.05
5747	η Bootis	G0	2.80	2.99	50 52.493	2.8611	− .0005	− .0045	+18 47 53.64	17.745	.201	− .367	97 81	20.17 20.36
5748	CD−24° 11167	F5	8.4		51 9.782	3.3539	+ .0212	+ .0020	−24 17 19.15	17.733	.235	+ .001	4	18.75
5749	BD−15° 3771	A0	8.7	8.4	51 24.265	3.2478	+ .0154	.0000	−15 40 13.41	17.723	.230	− .039	4	19.73
5750	BD−14° 3830	F5	8.1	8.4	51 29.305	3.2331	+ .0147	− .0029	−14 24 6.73	17.720	.228	− .012	4	19.28
5751	Wi (1) 13ʰ 825	K5	6.92	6.15	13 51 33.799	+3.1736	+ .0118	− .0017	− 9 10 4.61	−17.717	+ .224	− .011	4	19.22
5752	BD− 3° 3552 *s. pr.*	F8	8.81		51 56.434	3.1190	+ .0092	− .0019	− 4 13 33.72	17.701	.221	+ .024	4	19.82
5753	BD− 5° 3779	K0	9.3	9.1	51 58.294	3.1398	+ .0102	− .005	− 6 6 12.45	17.700	.222	+ .01	4	19.90
5754	Lal 25629	F5	6.15	6.7	51 58.636	2.9111	+ .0012	− .0202	+14 26 52.26	17.700	.207	.000	4	19.07
5755	BD+68° 747	K2	*9.25*		52 1.39	1.5358	+ .0079	− .0123	+67 47 26.34	17.698	.113	− .069	4	20.09
5756	BD+53° 1669	K0	*10.00*		13 52 1.514	+2.2402	− .0084	− .003	+52 59 41.39	−17.698	+ .161	+ .02	4	19.76
5757	BD− 7° 3736	F2	9.1	8.7	52 19.494	3.1630	+ .0112	.000	− 8 9 57.87	17.685	.225	+ .04	4	19.71
5758	92 Virginis	A3	5.94	5.73	52 23.219	3.0569	+ .0067	− .0023	+ 1 26 28.65	17.683	.218	+ .012	4	19.01
5759	BD+29° 2473	A0	7.11	7.15	52 27.136	2.7227	− .0039	− .0006	+29 3 48.34	17.680	.195	+ .005	4	18.75
5760	BD+61° 1387	G5	*9.15*	9.2	52 30.81	1.9391	− .0047	− .002	+60 56 13.28	17.678	.141	+ .01	4	19.50

5702. $11^{\mathrm{m}}4$, $7''5$, 358°.   5709. $10^{\mathrm{m}}3$, $4''8$, 294°.   5752. $8^{\mathrm{m}}8$, $5''2$, 62°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5761	Wi (2) 13^h 1090	F2	6.29	6.4	13 52 37.516	+2.6722	−0.0049	−0.0111	+32 25 21.35	−17.673	+0.192	+0.042	4	19.27
5762	BD+ 3° 2834	A5	6.93	7.50	52 37.593	+3.0355	+ .0057	− .0006	+ 3 22 39.65	17.673	+ .217	− .021	4	19.11
5763	BD+86° 199	F5	*9.07*	8.9	52 39.79	−5.768	+1.764	− .022	+85 55 7.58	17.671	− .389	+ .010	4	20.31
5764	CD−28° 10340	K2	10.0		52 52.169	+3.4140	+ .0245	+ .0008	−28 22 43.35	17.663	+ .243	− .035	4	19.78
5765	BD+46° 1914		9.1	8.8	52 52.430	2.4192	− .0081	− .002	+45 57 46.82	17.663	.174	+ .01	4	20.01
5766	BD+ 8° 2792	K0	8.7	9.3	13 53 10.928	+2.9776	+ .0036	− .009	+ 8 32 16.56	−17.650	+ .213	− .14	4	19.09
5767	BD+11° 2613	F0	*8.68*	8.3	53 15.736	2.9530	+ .0028	− .003	+10 41 48.69	17.647	.212	.00	4	18.42
5768	BD+49° 2253	K0	7.07	6.9	53 19.919	2.3327	− .0083	− .003	+49 24 12.34	17.644	.169	− .03	4	18.73
5769	BD+24° 2668	K0	*8.64*	8.46	53 34.657	2.7930	− .0020	− .0233	+23 45 21.17	17.633	.201	− .183	4	19.55
5770	BD+ 6° 2814	G5	*9.44*	8.9	53 44.960	2.9995	+ .0045	− .004	+ 6 33 30.23	17.626	.215	− .05	4	18.87
5771	BD−17° 3969	F5	9.3	9.1	13 53 51.465	+3.2825	+ .0170	− .0070	−18 13 38.60	−17.622	+ .236	+ .015	5	18.47
5772	47 Hydræ	B8	5.17	5.44	54 1.536	3.3645	+ .0215	− .0036	−24 34 56.14	17.615	.242	− .041	4	19.14
5773	BD+76° 504	K0	*8.68*	8.9	54 11.84	0.3805	+ .0918	+ .0055	+76 39 17.95	17.608	.034	+ .043	4	18.70
5774	BD+33° 2390	K0	7.9	7.32	54 24.516	2.6574	− .0050	.0000	+32 59 24.28	17.599	.193	+ .007	4	18.81
5775	BD+63° 1105	F5	7.32	7.13	54 40.35	1.8046	− .0011	− .0095	+63 10 52.57	17.588	.133	+ .024	4	19.24
5776	Brad 1828	A0	5.42	6.10	13 54 54.007	+2.8121	− .0014	− .0003	+22 5 9.83	−17.578	+ .204	− .051	4	18.27
5777	BD+40° 2710		*8.51*	8.74	55 3.781	2.5280	− .0068	.000	+40 15 59.88	17.571	.185	− .03	6	20.97
5778	BD+58° 1480	G5	*9.95*		55 20.598	2.0366	− .0059	.000	+58 6 58.83	17.560	.151	− .01	4	20.04
5779	BD+18° 2806		*9.80*		55 25.165	+2.8602	.0000	− .002	+18 14 11.90	17.557	+ .209	− .02	4	19.71
5780	BD+83° 402		*9.55*		55 28.82	−2.4539	+ .5914	− .0069	+83 20 27.24	17.554	− .165	+ .049	4	19.37
5781	48 Hydræ	F0	5.80	5.97	13 55 31.020	+3.3685	+ .0215	− .0152	−24 37 13.90	−17.552	+ .245	− .111	5	20.34
5782	BD+ 0° 3118	G5	7.82	7.9	55 38.915	3.0678	+ .0072	+ .0020	+ 0 26 16.10	17.547	.224	− .036	4	19.26
5783	Pi 13^h 269	F5	6.30	6.34	55 40.417	3.1084	+ .0089	− .0014	− 3 9 38.02	17.546	.227	− .069	4	19.30
5784	BD−19° 3789	K5	9.1	8.4	55 44.785	3.3084	+ .0182	− .0038	−20 1 47.11	17.543	.240	− .024	4	19.06
5785	BD+25° 2714	F8	9.3	9.2	55 45.432	2.7688	− .0024	− .0003	+25 10 27.25	17.542	.203	+ .011	4	18.73
5786	BD+ 4° 2811	G0	8.41	8.9	13 56 1.410	+3.0199	+ .0053	− .0018	+ 4 39 40.95	−17.531	+ .221	− .011	4	18.81
5787	BD+79° 435	A5	*8.42*	7.96	56 8.28	−0.2902	+ .1698	− .0081	+79 5 2.66	17.526	− .013	+ .049	4	19.52
5788	BD+27° 2317	F5	9.0	9.3	56 11.416	+2.7328	− .0032	− .0008	+27 39 5.94	17.524	+ .200	+ .011	4	19.10
5789	BD− 1° 2888	A5	8.3	8.26	56 33.065	3.0920	+ .0081	− .0017	− 1 41 45.13	17.508	.225	+ .015	4	18.74
5790	BD+47° 2109		*9.39*		56 49.800	2.3573	− .0076	− .007	+47 38 57.22	17.497	.176	+ .06	4	18.34
5791	BD+16° 2598	K0	7.7	8.04	13 56 53.312	+2.8886	+ .0010	− .001	+15 45 47.84	−17.494	+ .213	+ .01	4	18.72
5792	BD−11° 3650	K0	8.7	8.41	56 54.761	3.2060	+ .0131	− .0015	−11 32 37.21	17.493	.236	+ .020	4	19.09
5793	BD+52° 1762	G0	*9.85*		57 14.551	2.2217	− .0073	+ .001	+52 27 0.33	17.479	.166	+ .04	5 4	18.62 19.49
5794	BD+43° 2369		*9.62*		57 16.840	2.4576	− .0069	− .001	+43 13 38.49	17.477	.183	− .01	4	18.91
5795	BD+14° 2686	G5	7.12	7.31	57 27.051	2.9079	+ .0017	− .006	+14 7 5.66	17.470	.215	+ .04	4	19.33
5796	11 Bootis	A3	6.12	6.20	13 57 32.772	+2.7274	− .0030	− .0060	+27 46 20.78	−17.466	+ .202	+ .003	4	19.22
5797	τ Virginis	A2	4.34	4.34	57 34.396	3.0506	+ .0065	+ .0013	+ 1 55 52.22	17.465	.226	− .025	109 77	20.21 20.73
5798	BD+12° 2647	G	9.0		57 43.706	2.9353	+ .0026	− .005	+11 49 1.25	17.458	.213	.00	4	19.28
5799	BD−15° 3792	K5	9.3	8.7	58 14.121	3.2556	+ .0154	+ .0017	−15 30 21.27	17.436	.242	− .009	4	18.80
5800	BD+50° 2041	K0	*8.27*	7.82	58 15.299	2.2721	− .0073	− .004	+50 31 30.46	17.435	.170	− .01	4	19.03
5801	Lal 25774	K0	6.53	6.71	13 58 42.535	+3.2748	+ .0164	− .0128	−16 58 55.12	−17.416	+ .244	+ .012	4	19.76
5802	BD+44° 2319	G5	7.74	7.43	58 52.864	2.4342	− .0069	− .0048	+43 56 38.89	17.408	.183	+ .023	4	19.13
5803	BD+36° 2436	F5	7.10	6.62	58 54.102	2.5824	− .0054	− .0055	+36 29 56.22	17.407	.195	− .097	4	18.95
5804	BD+69° 732	A3	*9.07*	8.50	58 56.03	1.3384	+ .0170	+ .0004	+69 5 9.51	17.406	.104	+ .008	4	18.46
5805	CD−23° 11459 *m.*	F2	8.3		59 15.115	3.3652	+ .0210	− .0053	−23 45 47.13	17.392	.251	− .023	4	19.24
5806	BD+31° 2578	K0	*8.88*	8.9	13 59 18.021	+2.6779	− .0038	− .0012	+30 42 44.64	−17.390	+ .201	− .089	4	19.14
5807	Lal 25795	F2	6.21	6.55	59 25.[illegible]	3.3420	+ .0197	− .0014	−22 2 15.28	17.385	.250	− .015	4	18.27
5808	BD+73° 612	G5	*9.22*	9.4	59 33.13	0.8706	+ .0455	− .0044	+73 10 30.44	17.379	.071	+ .012	4	19.53
5809	Lal 25827	F2	6.28	6.49	13 59 54.724	3.0109	+ .0052	− .0008	+ 5 17 5.52	17.364	.227	− .002	4	18.90
5810	Pi 13^h 296	A0	6.05	6.46	14 0 1.115	2.2369	− .0068	− .0030	+51 21 21.97	17.359	.170	− .014	4	18.25
5811	BD− 5° 3799		8.8	8.1	14 0 1.208	+3.1439	+ .0103	− .005	− 6 5 0.54	−17.359	+ .236	.00	4	18.89
5812	Pi 13^h 286	K0	6.36	6.7	0 6.904	3.2468	+ .0149	− .0026	−14 35 16.05	17.355	.244	− .029	4	18.86
5813	BD+62° 1327	A2	7.30	7.26	0 22.13	1.8092	− .0006	− .002	+62 3 47.04	17.343	.140	.00	4	18.75
5814	BD+ 4° 2823	G5	9.5		0 23.684	3.0207	+ .0056	+ .0021	+ 4 26 29.98	17.342	.229	− .027	4	18.83
5815	BD+39° 2714		*9.59*		0 38.333	2.5230	− .0058	+ .005	+39 18 38.19	17.332	.192	− .03	5 6	20.47 20.76
5816	BD+ 7° 2741	F0	7.9	7.94	14 0 42.693	+2.9857	+ .0043	− .004	+ 7 22 52.98	−17.328	+ .226	+ .02	4	18.29
5817	BD+22° 2650	A0	*8.42*	8.51	0 46.083	2.8043	− .0009	− .001	+21 46 16.28	17.326	.213	− .01	4	19.26
5818	BD+32° 2425		*9.70*		0 54.748	2.6499	− .0040	.000	+32 9 1.75	17.320	.202	− .01	4	19.06
5819	BD− 9° 3846	K5	9.6	9.1	0 59.833	3.1860	+ .0122	+ .001	− 9 33 3.02	17.316	.241	.00	4	19.29
5820	CD−26° 10089	F0	9.2		1 6.327	3.4047	+ .0228	− .0010	−26 13 45.34	17.311	.257	− .009	4	19.95

5805. $8^{m}7$–$9^{m}5$, $0''9$, 290°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5821	BD+24° 2684	K0	*9.52*		14 1 9.852	+2.7632	−0.0018	−0.0028	+24 39 57.87	−17.308	+0.210	+0.015	4	19.40
5822	BD− 7° 3762	G0	8.3	7.95	1 9.987	+3.1628	+ .0111	− .008	− 7 36 51.46	17.308	+ .240	+ .02	4	19.08
5823	BD+81° 457		*9.42*		1 22.43	−1.0923	+ .2814	− .0050	+80 47 35.50	17.299	− .072	+ .002	4	18.99
5824	BD+16° 2607		*9.85*		1 33.923	+2.8730	+ .0010	+ .002	+16 27 22.57	17.291	+ .219	+ .04	4	18.48
5825	π Hydræ	K0	3.48	3.35	1 48.624	3.4074	+ .0228	+ .0031	−26 17 50.73	17.280	.259	− .160	5	18.64
5826	θ Centauri	K0	2.26		14 1 58.104	+3.5649	+ .0320	− .0436	−35 58 35.82	−17.273	+ .271	− .528	5 7	19.53 18.15
5827	94 Virginis	A0	6.56	6.60	2 3.423	3.1742	+ .0117	− .0005	− 8 30 37.75	17.269	.243	+ .009	4	18.99
5828	α Draconis	A0	3.64	3.84	2 13.31	1.6317	+ .0048	− .0081	+64 45 28.62	17.261	.129	+ .015	5	19.36
5829	BD+57° 1487	K0	7.24	6.93	2 35.989	2.0276	− .0046	− .002	+56 54 8.05	17.245	.157	.00	4	18.52
5830	Wi (2) 13ʰ 1311	K0	7.62	7.03	2 45.813	2.8472	+ .0004	− .0024	+18 17 36.29	17.237	.219	− .007	4	18.49
5831	BD+59° 1558	K7	*9.22*		14 3 1.323	+1.9202	− .0028	− .006	+59 20 3.12	−17.226	+ .151	.00	4	18.31
5832	Wi (2) 13ʰ 1331	K0	7.90	7.63	3 5.051	2.5230	− .0055	+ .0004	+38 47 54.77	17.223	.195	− .019	6 5	19.00 18.98
5833	BD+42° 2463		*9.46*	9.2	3 18.297	2.4522	− .0060	.000	+42 10 52.97	17.213	.191	.00	4	19.09
5834	CD−27° 9616	A5	8.8	8.3	3 18.728	3.4331	+ .0241	− .0041	−27 45 22.87	17.213	.263	− .066	4	19.28
5835	BD+29° 2495	F8	*9.49*	9.2	3 28.605	2.6824	− .0031	− .0067	+29 35 58.36	17.206	.207	+ .010	4	19.04
5836	BD+13° 2750	F8	9.2	8.9	14 3 31.378	+2.9147	+ .0024	+ .010	+12 58 33.00	−17.204	+ .225	− .05	4	18.60
5837	BD+68° 759	F	*9.32*	8.9	3 41.91	1.3777	+ .0144	− .0037	+67 56 37.78	17.196	.111	− .023	4	18.79
5838	BD− 1° 2907	F5	8.7	8.48	3 50.084	3.0938	+ .0084	− .0042	− 1 45 28.33	17.190	.240	− .009	4	18.56
5839	BD+47° 2118	F8	*8.26*	8.42	4 6.126	2.3285	− .0064	− .010	+47 12 56.47	17.177	.183	+ .06	4	18.73
5840	BD+ 1° 2890	K5	9.39		4 11.299	+3.0637	+ .0073	+ .0007	+ 0 45 10.89	17.174	+ .237	− .002	4	18.55
5841	BD+78° 476		*9.00*	8.6	14 4 22.49	−0.3099	+ .1594	− .0084	+78 28 7.31	−17.165	− .016	+ .032	4	19.50
5842	9 H Bootis	Mb	5.44	5.17	4 43.913	+2.3991	− .0062	+ .0004	+44 14 4.45	17.149	+ .189	− .037	4	18.94
5843	BD−19° 3827	G5	9.6		4 47.067	3.3182	+ .0180	− .0056	−19 31 46.57	17.147	.259	− .100	4	18.74
5844	BD+ 8° 2821 *br.*	K0	7.28	7.67	5 12.921	2.9780	+ .0044	− .003	+ 7 45 49.47	17.127	.233	.00	4	18.78
5845	Brad 1838	Ma	5.44	5.33	5 17.975	2.2495	− .0060	− .0052	+49 50 8.63	17.123	.177	+ .046	4	18.98
5846	BD+33° 2416	G5	*8.78*	9.2	14 5 20.468	+2.6157	− .0040	− .006	+33 19 37.53	−17.121	+ .206	+ .09	4	18.49
5847	BD−10° 3835 *m.*	F2	9.8		5 23.926	3.2040	+ .0127	+ .0022	−10 41 37.68	17.119	.250	− .006	4	19.01
5848	Cape (80) 7744	A2	6.78	6.98	5 34.190	3.4785	+ .0262	− .0035	−30 14 32.97	17.111	.271	− .027	4	19.37
5849	BD+15° 2670	K0	8.44	8.36	5 49.805	2.8885	+ .0018	− .002	+14 47 36.22	17.099	.226	.00	4	19.07
5850	BD+23° 2657	K0	*8.58*	8.01	5 58.944	2.7687	− .0012	− .006	+23 31 57.70	17.092	.217	− .02	4	18.73
5851	BD− 4° 3633	K0	8.3	8.02	14 6 20.350	+3.1349	+ .0100	− .0016	− 5 4 47.31	−17.076	+ .247	− .030	4	19.32
5852	BD+38° 2518	F0	7.55	7.90	6 22.403	2.5315	− .0048	− .0036	+37 42 26.37	17.074	.200	− .016	4	19.17
5853	BD+20° 2934	G0	8.90	9.1	6 27.550	2.8214	+ .0001	− .003	+19 43 58.78	17.070	.223	− .01	4	19.52
5854	BD+ 6° 2844		*9.42*		6 33.166	3.0009	+ .0053	− .006	+ 5 50 57.21	17.066	.237	+ .06	4	19.07
5855	BD+65° 980		*9.45*	9.2	6 35.68	1.5461	+ .0079	+ .0014	+65 19 52.33	17.061	.126	− .025	4	19.34
5856	d Bootis	F5	4.82	5.06	14 6 44.967	+2.7383	− .0016	− .0017	+25 28 12.47	−17.057	+ .217	− .072	4	19.10
5857	CD−23° 11537	K0	8.3	7.71	6 45.399	3.3745	+ .0206	− .0043	−23 15 54.51	17.057	.266	− .020	4	20.07
5858	BD+54° 1650	F5	*8.97*		6 45.400	2.0969	− .0050	+ .002	+54 16 7.96	17.057	.167	− .01	4	19.04
5859	BD−21° 3857	A3	9.8	ft.	6 48.277	3.3524	+ .0195	− .0001	−21 43 15.59	17.054	.265	+ .033	5	19.92
5860	BD− 2° 3800 *s. pr.*	F8	8.8	8.54	7 10.991	3.1091	+ .0090	+ .0041	− 2 57 29.36	17.038	.246	− .182	4	19.56
5861	BD+ 2° 2782	G5	8.3	8.33	14 7 14.462	+3.0487	+ .0068	− .0001	+ 1 56 55.97	−17.034	+ .242	− .021	4	19.55
5862	BD−17° 4025	G5	8.8	8.4	7 29.141	+3.2953	+ .0168	− .0036	−17 30 22.19	17.023	+ .261	− .085	4	19.42
5863	BD+82° 411		*8.83*	8.8	8 2.22	−1.9581	+ .4191	+ .0086	+81 59 8.23	16.998	− .144	.000	4	20.05
5864	BD+50° 2054 *s. pr.*	G5	9.3		8 4.756	+2.2094	− .0054	− .017	+50 37 28.01	16.995	+ .178	+ .11	4	20.34
5865	Brad 1837	K0	5.25	5.3	8 10.745	3.4322	+ .0234	− .0012	−26 53 6.98	16.991	.273	− .055	4	19.33
5866	BD−15° 3824	F8	9.2		14 8 11.155	+3.2693	+ .0155	− .0005	−15 29 35.57	−16.991	+ .260	+ .046	4	19.73
5867	BD+ 4° 2837 *m.*	G0	*8.94*	8.5	8 20.218	3.0201	+ .0059	− .0039	+ 4 14 29.61	16.984	.242	+ .046	4	19.06
5868	BD+28° 2299 *m.*		*9.65*		8 34.196	2.6988	− .0022	− .008	+27 44 33.32	16.972	.218	− .06	4	19.27
5869	BD+45° 2157		*9.47*		8 35.230	2.3474	− .0056	+ .001	+45 34 13.46	16.972	.189	− .02	4	19.49
5870	κ Virginis	K0	4.31	4.26	8 37.511	3.1969	+ .0125	+ .0005	− 9 54 6.93	16.970	.255	+ .130	70 48	19.64 19.97
5871	BD+63° 1120	F5	*8.25*	7.68	14 8 38.50	+1.6828	+ .0036	− .004	+62 53 53.26	−16.969	+ .138	− .02	4	19.41
5872	CD−24° 11348	G	10.10		8 48.048	3.4065	+ .0220	− .0062	−25 6 59.03	16.962	.272	− .104	4	20.37
5873	BD−13° 3845	Mb	7.18	7.17	8 49.963	+3.2435	+ .0144	− .0033	−13 29 5.39	16.961	+ .259	− .040	4	20.35
5874	4 Urs Min	K0	5.00	5.03	9 8.25	−0.2633	+ .1474	− .0089	+77 55 24.40	16.946	− .013	+ .026	9	19.06
5875	BD+21° 2627	K7	*9.4*		9 41.886	+2.7892	− .0003	− .003	+21 35 4.28	16.920	+ .225	+ .02	4	19.75
5876	BD+40° 2753		*9.65*		14 9 43.619	+2.4670	− .0049	+ .003	+40 12 7.26	−16.919	+ .200	+ .02	4	20.06
5877	BD+ 9° 2862	K0	8.3	7.97	9 47.374	2.9584	+ .0041	− .001	+ 9 3 40.60	16.916	.238	+ .01	4	20.22
5878	BD+43° 2394		*9.75*		9 56.300	2.3942	− .0053	.000	+43 23 35.34	16.909	.194	.00	4	20.32
5879	BD+35° 2533		*9.63*		10 0.412	2.5744	− .0039	− .003	+34 45 45.59	16.906	.209	− .03	5	20.03
5880	BD+18° 2846		*9.45*		10 1.819	2.8433	+ .0010	− .003	+17 42 55.42	16.905	.230	− .07	4	20.31

5844. $10^{m}8$, $5''1$, 353°.
5847. $10^{m}3$–$10^{m}8$, $0''9$, 320°.

5860. $8^{m}8$, $6''9$, 28°.
5864. $9^{m}8$, $11''$, 77°.

5867. $9^{m}5$ $9^{m}8$, $0''3$, 161°.
5868. $9^{m}9$–$10^{m}6$, $0''4$, 158°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5881	BD− 6° 3952	K0	8.1	7.9	14 10 3.809	+3.1569	+0.0108	−0.003	− 6 40 56.73	−16.903	+0.255	0.00	4	20.06
5882	BD+11° 2652	G5	*9.19*		10 13.415	2.9290	+ .0033	+ .002	+11 18 9.98	16.896	.238	+ .04	4	19.30
5883	BD+56° 1717	F8	*9.50*	8.1	10 18.077	2.0088	− .0032	− .006	+55 55 48.21	16.892	.165	.00	4	20.07
5884	BD+ 7° 2761		*9.84*		10 26.604	2.9853	+ .0049	− .002	+ 6 55 3.20	16.885	.242	+ .03	4	19.36
5885	BD+28° 2304	K0	*8.63*	8.60	10 31.830	2.6902	− .0021	+ .0010	+27 57 42.22	16.881	.218	− .016	4	19.63
5886	Grmb 2091	Ma	5.36	5.30	14 10 34.50	+1.1127	+ .0274	− .0055	+69 48 28.50	−16.879	+ .095	− .062	12	20.10
5887	Lal 26093	Ma	6.62	6.37	10 50.957	3.0259	+ .0062	− .0020	+ 3 42 32.61	16.866	.245	− .011	4	19.51
5888	BD+48° 2182		*9.16*	8.6	10 53.851	2.2528	− .0051	+ .001	+48 37 5.44	16.864	.185	− .06	4	19.87
5889	Pi 14^h 26	A2	6.40	6.61	10 58.526	2.7771	− .0005	+ .0028	+22 14 46.25	16.860	.227	− .007	4	18.97
5890	BD+36° 2455		10.1		11 8.143	2.5484	− .0040	− .003	+35 55 35.37	16.852	.208	− .03	4	19.87
5891	BD+64° 991	F8	8.35	8.06	14 11 16.02	+1.5462	+ .0081	+ .0026	+64 37 6.59	−16.846	+ .130	+ .032	4	19.86
5892	BD−10° 3861	K0	9.8		11 38.875	3.2117	+ .0129	+ .0007	−10 49 59.48	16.828	.261	− .036	4	19.79
5893	BD− 8° 3733	F8	8.7	8.9	11 42.959	3.1878	+ .0120	− .005	− 9 0 22.52	16.825	.259	− .02	4	19.54
5894	BD+30° 2498		*9.45*		11 45.329	2.6440	− .0027	+ .0003	+30 32 28.12	16.823	.217	+ .045	4	19.80
5895	ι Virginis	F5	4.16	4.55	11 49.022	3.1442	+ .0105	− .0012	− 5 37 9.53	16.820	.257	− .427	4	19.76
5896	α Bootis	K0	0.24	0.44	14 12 0.726	+2.8135	+ .0005	− .0778	+19 35 55.19	−16.810	+ .230	−2.004	70 49	19.57 19.52
5897	CD−29° 10953 *m.*	K0	8.6		12 9.006	3.4866	+ .0257	− .0042	−29 36 3.05	16.804	.284	− .049	4	20.25
5898	BD− 2° 3812	A0	6.03	6.67	12 21.234	3.1087	+ .0090	− .0019	− 2 49 28.91	16.794	.255	− .024	4	19.81
5899	BD+ 6° 2864	F5	8.3	8.64	12 34.778	2.9972	+ .0053	− .003	+ 5 54 9.74	16.784	.246	+ .01	4	19.40
5900	BD−21° 3877	G5	8.09	7.91	12 43.429	3.3596	+ .0193	− .0044	−21 24 59.58	16.777	.275	− .027	4	19.42
5901	BD− 0° 2802	K2	9.0		14 12 47.812	+3.0852	+ .0083	− .0007	− 0 58 37.15	−16.774	+ .253	− .018	4	19.78
5902	BD−19° 3846	A3	6.89	6.98	13 0.862	3.3335	+ .0181	− .0058	−19 35 34.89	16.763	.274	− .034	4	19.59
5903	ι Bootis *br.*	A5	4.87	5.13	13 19.944	2.1417	− .0043	− .0157	+51 44 9.01	16.748	.179	+ .086	4	20.35
5904	λ Bootis	A0	4.26	4.67	13 20.569	2.3001	− .0049	− .0179	+46 27 18.87	16.747	.191	+ .151	4	20.19
5905	Oelt 14435	F8	6.60	6.78	13 24.770	1.9387	− .0018	+ .0020	+57 3 43.06	16.744	.161	− .111	4	19.08
5906	BD+41° 2483		9.2	8.77	14 13 30.460	+2.4235	− .0045	− .001	+41 26 48.98	−16.739	+ .202	− .05	4	19.45
5907	BD+12° 2677	K0	*7.60*	8.06	13 43.374	2.9202	+ .0032	− .004	+11 42 18.13	16.729	.241	.00	4	18.58
5908	Lal 26147	G0	6.50	6.22	13 45.668	3.1653	+ .0111	+ .0164	− 7 10 3.47	16.727	.261	− .238	4	19.76
5909	BD− 4° 3661	F8	9.3	8.32	13 46.551	3.1342	+ .0099	+ .0007	− 4 46 28.30	16.726	.259	− .045	4	19.97
5910	BD+ 1° 2910	G0	8.4	8.41	14 1.819	3.0532	+ .0072	+ .0018	+ 1 30 49.83	16.714	.252	+ .061	4	19.21
5911	BD+32° 2453		*9.18*	9.3	14 14 2.329	+2.6125	− .0028	.000	+31 57 16.73	−16.714	+ .218	+ .01	4	19.58
5912	BD+76° 514		*9.47*		14 2.61	0.1616	+ .0970	+ .0305	+75 46 42.50	16.714	.020	+ .028	4	19.63
5913	Cape (50) 2538	A0	5.74	5.6	14 12.579	3.3176	+ .0173	− .0040	−18 20 46.25	16.705	.274	− .041	4	20.23
5914	BD+19° 2787		*9.22*		14 13.774	2.8181	+ .0008	− .005	+19 1 14.04	16.704	.235	+ .03	4	18.76
5915	BD+74° 573	F8	*8.74*	8.5	14 20.86	0.5440	+ .0639	+ .0021	+73 42 15.07	16.699	.051	+ .010	4 5	19.51 19.08
5916	BD+21° 2638	K0	7.07	7.25	14 14 39.262	+2.7783	.0000	− .004	+21 40 25.17	−16.684	+ .232	− .02	4	19.72
5917	λ Virginis	A2	4.60	4.49	14 46.663	3.2439	+ .0142	− .0015	−13 0 12.55	16.678	.270	+ .023	64 47	19.60 20.05
5918	BD−14° 3922	K0	9.1	8.8	14 50.974	3.2696	+ .0152	.0000	−14 52 7.86	16.674	.272	+ .012	4	18.79
5919	BD−12° 4019	Mc	8.9	8.32	14 51.596	3.2448	+ .0142	+ .0006	−13 3 46.95	16.674	.270	− .008	4	19.87
5920	CD−23° 11627	G5	9.0		14 55.630	3.4014	+ .0211	− .0027	−23 53 36.49	16.670	.283	− .027	4	20.03
5921	BD+25° 2757	K5	8.9	8.7	14 14 59.882	+2.7158	− .0012	− .0018	+25 40 26.01	−16.667	+ .227	+ .001	4	19.54
5922	BD+20° 2957	K0	8.6	8.03	15 4.958	2.7990	+ .0005	− .004	+20 13 26.82	16.663	.234	+ .01	4	19.55
5923	Brad 1853	F0	5.31	5.48	15 23.884	2.8958	+ .0027	+ .0074	+13 22 21.74	16.648	.242	− .038	4	18.60
5924	BD+50° 2063	K0	*9.25*	9.5	15 31.917	2.1787	− .0042	+ .001	+50 11 43.90	16.641	.184	+ .02	4	18.81
5925	BD+ 1° 2913	A3	6.17	5.78	15 35.854	3.0629	+ .0076	− .0038	+ 0 45 7.61	16.638	.255	− .014	4	18.56
5926	BD+52° 1788	A2	6.74	7.0	14 15 43.043	+2.1041	− .0036	+ .002	+52 24 5.23	−16.632	+ .178	− .03	4	19.06
5927	Grmb 2098	K0	7.20	7.00	15 45.619	2.3921	− .0044	+ .0035	+42 22 27.24	16.630	.202	− .073	5	19.01
5928	CD−25° 10280	G0	*9.55*		15 59.364	3.4270	+ .0222	+ .0003	−25 22 0.63	16.619	.286	− .067	4 5	19.50 20.68
5929	BD+72° 636	K0	*8.90*	8.57	16 6.69	0.7876	+ .0457	+ .0032	+71 52 46.74	16.613	.072	+ .016	4	18.82
5930	BD−16° 3844	G5	8.3	8.3	16 28.994	3.3035	+ .0166	− .0047	−17 6 49.24	16.595	.277	− .069	4	19.28
5931	Lal 26239	A2	6.34	6.2	14 16 38.702	+2.6255	− .0023	− .0012	+30 47 45.12	−16.587	+ .222	+ .001	4	18.87
5932	CD−27° 9786	G5	6.92	6.13	17 23.520	3.4727	+ .0242	− .0072	−27 56 34.86	16.550	.292	− .013	4	18.64
5933	BD+10° 2670	G	9.27	8.8	17 28.050	2.9408	+ .0040	− .004	+ 9 54 59.44	16.546	.249	− .01	4	18.19
5934	Lac 5907	B8	5.72		17 31.671	3.5898	+ .0303	− .0084	−34 25 18.24	16.543	.302	+ .003	4	19.22
5935	BD− 0° 2815		9.2		17 37.841	3.0850	+ .0083	− .0029	− 0 56 2.10	16.538	.261	− .077	4	18.75
5936	BD+13° 2784	G5	*8.83*	8.9	14 17 40.977	+2.8965	+ .0030	− .006	+13 7 51.33	−16.535	+ .246	− .01	4	18.53
5937	BD+55° 1690	G0	*9.05*	8.8	17 53.718	1.9008	− .0021	− .009	+55 2 29.90	16.525	.171	+ .04	4	18.79
5938	BD+63° 1128	A2	*8.32*	8.29	18 8.79	1.5486	+ .0082	.000	+63 34 30.91	16.512	.135	.00	4	18.77
5939	BD+67° 883		*9.42*	9.2	18 36.29	1.2706	+ .0187	− .0022	+67 8 20.04	16.490	.113	+ .006	4 5	19.26 19.04
5940	BD+44° 2347	Ma	8.9	8.1	18 38.502	2.3295	− .0042	.000	+44 21 42.64	16.488	.200	+ .01	4	18.73

5897. 9^m1-9^m7, $0''9$, 109°.

5903. 7^m5, 38″, 33°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
5941	BD+16° 2639		*9.55*		14 18 38.759	+2.8502	+0.0019	−0.003	+16 18 54.95	−16.488	+0.243	−0.02	4	18.59
5942	BD− 8° 3765	G0	10.0		18 47.810	3.1875	+ .0119	− .003	− 8 34 50.05	16.480	.272	− .02	4	19.21
5943	BD+36° 2478	G0	*8.10*	8.13	18 52.090	2.5195	− .0032	.000	+36 0 44.96	16.477	.216	+ .03	[illegible]	18.26
5944	2 Libræ	K0	6.30	6.21	19 7.155	3.2257	+ .0133	− .0010	−11 20 56.94	16.464	.276	− .064	4	19.06
5945	BD+33° 2452	K0	7.12	8.3	19 12.260	2.5799	− .0027	− .006	+32 52 4.22	16.460	.221	− .01	4	18.38
5946	BD+24° 2728	K0	*8.61*	8.28	14 19 20.951	+2.7253	− .0005	+ .0022	+24 28 13.16	−16.453	+ .234	− .002	4	19.00
5947	BD−21° 3891	Ma	8.1	7.99	19 26.978	3.3712	+ .0192	− .0026	−21 20 43.19	16.448	.288	− .081	4	19.06
5948	BD+46° 1959		*9.09*		19 27.847	+2.2810	− .0040	.000	+46 1 22.99	16.447	+ .197	+ .03	[illegible]	18.95
5949	BD+84° 322	K	8.52	8.58	20 1.05	−4.6242	+ .9959	+ .0007	+84 18 44.30	16.419	− .380	+ .016	[illegible]	19.33
5950	Wi (1) 14$^{\mathrm{h}}$ 301	A0	5.74	5.82	20 4.172	+2.9566	+ .0047	.0000	+ 8 36 24.85	16.416	+ .254	− .018	[illegible]	18.87
5951	Pi 14$^{\mathrm{h}}$ 68	K0	5.39	5.3	14 20 14.478	+3.4217	+ .0214	− .0055	−24 26 37.66	−16.407	+ .294	− .031	4	19.27
5952	BD+39° 2760	F8	7.17	7.27	20 16.413	2.4354	− .0036	+ .0049	+39 41 38.26	16.406	.211	− .183	[illegible]	19.04
5953	BD−10° 3891	A2	9.3	9.3	20 16.920	3.2183	+ .0130	− .0018	−10 44 5.20	16.405	.277	+ .014	[illegible]	18.33
5954	BD+60° 1534	K0	7.61	7.98	20 19.20	1.7348	+ .0031	− .001	+60 8 33.51	16.404	.152	− .02	4	18.89
5955	BD+15° 2706		*9.27*		20 29.139	2.8615	+ .0022	+ .002	+15 21 29.79	16.396	.248	− .02	4	18.55
5956	BD+61° 1423		*9.57*	9.1	14 20 30.97	+1.6876	+ .0042	− .008	+60 57 47.62	−16.394	+ .149	+ .03	4 3	19.48 17.55
5957	BD+46° 1961		*9.39*		20 38.069	2.2673	− .0038	+ .011	+46 18 15.88	16.388	.197	− .19	4	19.47
5958	BD− 3° 3623		9.8		20 51.965	3.1272	+ .0097	− .0005	− 4 2 32.88	16.376	.269	+ .002	4	18.81
5959	Wi (1) 14$^{\mathrm{h}}$ 315	K0	6.59	6.42	20 57.372	3.2504	+ .0142	− .0045	−12 59 30.27	16.372	.280	− .003	4	19.57
5960	BD+ 4° 2861		*9.58*		21 0.084	3.0217	+ .0064	− .0058	+ 3 47 6.84	16.370	.261	+ .001	4	19.54
5961	BD+ 6° 2878	K0	7.6	7.24	14 21 3.756	+2.9919	+ .0056	− .001	+ 5 58 38.07	−16.367	+ .259	− .01	4	19.51
5962	BD+28° 2322	F0	*9.66*		21 31.535	2.6609	− .0013	− .0005	+28 1 21.61	16.343	.232	− .001	4	19.00
5963	BD+31° 2617		*9.45*		21 36.060	2.5991	− .0021	− .0002	+31 27 34.17	16.339	.227	− .028	4	19.07
5964	BD+71° 685		*8.92*		22 7.14	0.8393	+ .0407	+ .0035	+70 49 36.62	16.313	.078	+ .026	4	19.52
5965	BD+26° 2569	K5	7.60	7.78	22 20.261	2.6831	− .0009	− .0057	+26 37 34.28	16.302	.234	− .054	4	19.08
5966	θ Bootis	F8	4.06	4.23	14 22 28.406	+2.0686	− .0024	− .0258	+52 13 12.53	−16.295	+ .182	− .406	4	20.00
5967	BD+58° 1500	A0	*9.20*	8.9	22 30.770	1.8159	+ .0014	+ .002	+58 13 38.60	16.293	.161	.00	4 3	19.43 20.11
5968	BD+22° 2701	K0	*8.66*	8.45	22 31.148	2.7541	+ .0002	− .002	+22 15 38.33	16.293	.241	+ .01	4	19.70
5969	*f* Bootis	A5	5.36	5.18	22 44.047	2.7954	+ .0010	− .0052	+19 35 9.52	16.282	.244	+ .015	64 45	19.00 18.80
5970	BD+12° 2695	G	*9.57*		22 53.032	2.9094	+ .0036	− .005	+11 49 31.57	16.274	.254	− .03	[illegible]	19.83
5971	BD+38° 2555		*9.49*	9.1	14 22 59.395	+2.4553	− .0031	.000	+38 20 17.86	−16.269	+ .216	− .02	5	20.06
5972	BD−14° 3959	F5	7.26	7.18	22 59.870	+3.2743	+ .0150	− .0118	−14 28 42.73	16.268	+ .285	− .054	[illegible]	19.43
5973	BD+77° 541	G5	*8.62*	8.3	23 19.39	−0.3225	+ .1366	+ .0018	+77 1 29.92	16.252	− .020	− .004	4	19.95
5974	CD−26° 10303	A3	8.8	8.3	23 22.332	+3.4706	+ .0234	+ .0015	−26 57 0.76	16.249	+ .303	− .038	4	20.30
5975	52 Hydræ *br.*	B8	5.00	5.4	23 29.028	3.5091	+ .0251	− .0019	−29 7 57.97	16.243	.306	− .033	[illegible]	20.11
5976	BD+15° 2714	K0	7.34	7.86	14 23 41.272	+2.8610	+ .0026	− .001	+15 6 45.31	−16.233	+ .252	+ .01	4	19.37
5977	BD+53° 1711	K0	*8.17*	8.08	23 50.248	2.0319	− .0018	− .003	+52 59 4.42	16.225	.181	− .03	[illegible]	18.56
5978	BD− 8° 3781	K5	8.9	8.7	23 54.592	3.1886	+ .0118	− .002	− 8 23 56.31	16.222	.280	.00	4	19.06
5979	BD−22° 3794	F8	8.2	7.87	23 57.235	3.3998	+ .0201	+ .0012	−22 36 58.56	16.219	.298	− .020	4	19.54
5980	φ Virginis *br.*	K0	4.99	5.26	24 4.674	3.0984	+ .0088	− .0089	− 1 52 12.45	16.213	.273	− .010	4	18.37
5981	BD−16° 3873	F0	8.3	8.7	14 24 16.735	+3.3074	+ .0163	− .0034	−16 36 24.04	−16.202	+ .292	− .007	4	18.75
5982	BD+41° 2504	F0	6.50	6.37	24 17.454	2.3794	− .0033	− .006	+41 23 0.87	16.202	.211	− .02	4	19.11
5983	BD+33° 2466	A3	*8.69*	8.00	24 21.018	2.5555	− .0023	.000	+33 18 32.10	16.199	.226	+ .01	4	19.06
5984	BD+59° 1582	G5	*9.50*	9.5	24 27.290	1.7630	+ .0027	− .014	+58 58 41.02	16.193	.158	− .04	[illegible]	19.83
5985	Lac 5953	F8	7.02	7.14	24 28.537	3.5050	+ .0248	+ .0007	−28 45 24.57	16.192	.308	− .011	[illegible]	20.01
5986	BD+45° 2182		*9.35*	9.2	14 24 34.792	+2.2725	− .0033	− .002	+45 25 53.82	−16.187	+ .202	− .03	4	18.64
5987	BD−18° 3834		10.2		24 43.296	3.3410	+ .0176	− .0033	−18 46 49.64	16.180	.294	+ .022	4	20.36
5988	Wi (2) 14$^{\mathrm{h}}$ 478	K2	6.19	6.38	24 57.612	2.4870	− .0027	− .0035	+36 33 15.20	16.167	.221	− .018	4	18.80
5989	Wi (1) 14$^{\mathrm{h}}$ 472 *n. f.*	A0	6.95	7.10	25 1.927	2.6409	− .0012	+ .0005	+28 38 51.79	16.164	.235	− .009	4	18.97
5990	BD+ 9° 2901	F8	8.7	8.39	25 10.072	2.9417	+ .0044	.000	+ 9 24 22.28	16.157	.261	− .10	4	18.77
5991	BD+ 2° 2831		*9.66*		14 25 32.429	+3.0409	+ .0071	− .0030	+ 2 17 44.96	−16.137	+ .270	+ .002	4	19.57
5992	BD+83° 415		*8.85*	8.52	25 35.29	−3.4822	+ .6596	− .0078	+83 6 8.55	16.135	− .293	+ .007	4	19.58
5993	BD+34° 2531	G	*9.38*		25 40.359	+2.5335	− .0023	− .005	+34 12 1.56	16.130	+ .227	+ .03	4	18.93
5994	*g* Bootis	G0	5.61	5.70	25 50.829	2.1192	− .0025	− .0319	+50 12 9.01	16.121	.190	− .055	4	19.76
5995	BD− 6° 4012	K0	8.3	7.90	25 54.535	3.1662	+ .0111	+ .001	− 6 42 54.90	16.118	.282	+ .02	[illegible]	18.76
5996	BD+47° 2150	A0	7.89	8.45	14 25 59.591	+2.2051	− .0029	− .003	+47 30 22.28	−16.114	+ .197	+ .09	4	19.36
5997	BD+17° 2743		*9.34*	9.4	26 6.334	2.8277	+ .0020	− .002	+17 7 26.44	16.108	.253	.00	4	18.99
5998	BD+24° 2737	K0	*9.44*	9.1	26 19.038	2.7102	− .0001	− .004	+24 28 38.50	16.097	.243	+ .05	4	18.86
5999	BD+54° 1682 *br.*	F8	*8.57*	8.76	26 23.032	1.9747	− .0009	− .006	+54 2 10.73	16.093	.179	+ .05	4	19.53
6000	204 B Bootis	G0	6.45	6.55	26 27.610	2.3511	− .0031	+ .0142	+42 9 22.95	16.089	.212	− .217	7	21.06

5975. 10$^{\mathrm{m}}$0, 3″0, 279°.

5980. 9$^{\mathrm{m}}$0, 4″6, 111°.

5989. 7$^{\mathrm{m}}$45, 25″, 262°.

5999. 13$^{\mathrm{m}}$, 2″5, 191°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6001	BD+37° 2537	G	8.89	8.50	14 26 28.960	+2.4676	−0.0027	−0.001	+37 12 10.17	−16.088	+0.222	+0.08	4	19.27
6002	BD+14° 2742	F8	8.95	8.6	26 50.068	2.8750	+ .0030	− .005	+13 54 0.85	16.070	.257	− .02	4	18.87
6003	BD+56° 1742	A2	8.64	8.55	27 31.222	1.8624	+ .0010	− .001	+56 28 8.05	16.034	.170	+ .01	4	18.41
6004	CD−24° 11545	G0	9.3	8.6	27 34.746	+3.4422	+ .0216	− .0022	−24 43 33.46	16.031	+ .308	− .040	4	18.18
6005	5 Urs Min	K2	4.37	4.62	27 40.47	−0.1592	+ .1155	+ .0034	+76 3 6.07	16.026	− .005	+ .017	9	18.47
6006	BD−10° 3920	G5	8.3	8.68	14 27 53.703	+3.2229	+ .0129	− .0001	−10 34 56.23	−16.014	+ .290	+ .007	4	18.60
6007	BD+49° 2307		9.15	9.1	28 0.007	2.1264	− .0023	+ .002	+49 38 27.41	16.009	.193	.00	4	17.80
6008	BD−20° 4048	G5	8.9		28 4.250	3.3792	+ .0189	− .0034	−20 51 12.33	16.005	.303	− .128	4	18.75
6009	ρ Bootis	K0	3.78	[illegible]	28 22.889	2.5937	− .0014	− .0078	+30 43 19.13	15.989	.235	+ .110	9	20.13
6010	BD−22° 3807	F2	9.6		28 24.402	3.4091	+ .0201	− .0044	−22 39 6.13	15.987	.307	+ .023	4	19.26
6011	BD− 0° 2838		9.6		14 28 36.521	+3.0782	+ .0063	− .0025	− 0 23 27.11	−15.977	+ .278	− .003	4	18.87
6012	γ Bootis	F0	3.00	3.42	28 51.346	2.4262	− .0026	− .0095	+38 39 27.80	15.963	.221	+ .144	15 14	22.76 22.86
6013	26 Bootis	F0	5.96	5.98	28 54.356	2.7360	+ .0005	− .0094	+22 36 42.19	15.961	.248	+ .029	4	18.36
6014	BD+ 4° 2879	F2	7.9	7.77	28 56.110	3.0160	+ .0065	+ .0006	+ 4 0 41.47	15.959	.271	+ .012	4	18.31
6015	BD+ 5° 2889	G5	6.91	6.85	29 3.350	2.9923	+ .0059	.000	+ 5 40 38.03	15.953	.272	− .06	4	18.35
6016	BD+72° 645	K5	8.25	8.60	14 29 8.67	+0.4874	+ .0611	− .0039	+72 36 46.77	−15.948	+ .050	+ .012	4	18.40
6017	BD+ 0° 3202		9.37	8.9	29 18.303	3.0708	+ .0061	− .0014	+ 0 7 57.84	15.940	.278	− .011	4	18.33
6018	BD+23° 2706	G5	8.9	8.11	29 32.010	2.7235	+ .0004	− .0058	+23 17 17.25	15.928	.248	+ .025	4	18.76
6019	56 B Draconis	F0	6.18	6.0	29 32.37	1.6340	+ .0061	− .0064	+60 34 40.03	15.927	.151	+ .019	4	18.04
6020	BD+44° 2367	F5	9.0	8.30	29 41.882	2.2855	− .0027	− .008	+44 6 28.19	15.919	.209	+ .06	4	18.44
6021	BD− 2° 3861		9.6	9.3	14 30 0.178	+3.1105	+ .0093	− .0010	− 2 39 40.36	−15.903	+ .283	+ .012	4	18.81
6022	BD+11° 2691	A2	7.69	7.94	30 12.838	2.9163	+ .0040	.000	+10 52 23.43	15.891	.266	.00	4	18.27
6023	BD+ 8° 2883		8.6	8.40	30 24.159	2.9597	+ .0051	− .002	+ 7 53 23.24	15.881	.270	+ .02	4	18.77
6024	BD− 4° 3713	F8	7.6	8.45	30 38.145	3.1341	+ .0100	+ .0006	− 4 18 3.76	15.869	.286	− .033	4	18.78
6025	BD+17° 2757		9.60	9.3	31 5.439	2.8260	+ .0024	− .002	+16 46 20.19	15.845	.259	− .02	4	18.12
6026	σ Bootis	F0	4.48	4.65	14 31 11.761	+2.5981	− .0011	+ .0149	+30 5 31.13	−15.839	+ .239	+ .120	4	18.52
6027	BD+45° 2196	G	10.02		31 34.075	2.2326	− .0023	+ .001	+45 40 6.36	15.819	.204	+ .04	4	18.39
6028	BD+40° 2797	G5	8.82	9.18	31 36.091	2.3895	− .0024	+ .0076	+39 46 15.61	15.817	.221	− .300	6	20.75
6029	Åbo (30) 333	K5	5.90	5.72	31 51.805	2.1028	− .0016	− .0048	+49 43 0.01	15.803	.196	+ .049	4	19.06
6030	Grmb 2132	F5	6.63	6.71	31 54.32	1.2478	+ .0188	+ .0099	+65 44 40.10	15.801	.119	+ .047	4	18.47
6031	BD−13° 3931	K5	8.7	8.4	14 31 57.122	+3.2729	+ .0145	− .0006	−13 40 45.76	−15.798	+ .301	− .024	4	18.62
6032	CD−26° 10381	F0	9.5		32 0.599	+3.4781	+ .0227	− .0009	−26 13 49.06	15.795	+ .319	− .016	4	19.58
6033	Carr 2188	G5	7.10	[illegible]	32 11.08	−2.2260	+ .3810	− .0354	+81 9 54.90	15.786	− .193	− .118	9	19.04
6034	BD+35° 2581	K0	8.45	8.37	32 12.403	+2.4952	− .0019	+ .001	+35 2 7.11	15.785	+ .231	.00	5	19.57
6035	BD−15° 3906	G5	9.8		32 15.888	3.3104	+ .0159	− .0007	−16 5 20.70	15.782	.305	+ .004	5	18.91
6036	BD− 7° 3876	F8	8.9	8.9	14 32 21.992	+3.1894	+ .0117	− .003	− 8 3 15.87	−15.776	+ .294	− .01	4	18.70
6037	Lal 26645	K0	6.48	6.25	32 29.904	2.7123	+ .0004	− .0006	+23 35 52.52	15.769	.251	+ .027	4	19.29
6038	Pi 14h 127	F8	6.24	6.77	32 44.318	3.2478	+ .0137	− .0594	−11 57 58.18	15.756	.299	+ .363	4	18.75
6039	BD+42° 2516		9.46		32 50.671	2.3275	− .0025	+ .002	+42 2 9.35	15.750	.217	− .03	4	18.83
6040	BD+ 7° 2812		9.86		32 50.676	2.9713	+ .0055	− .002	+ 6 59 41.31	15.750	.274	+ .08	4	18.85
6041	BD+22° 2721		9.79	9.3	14 33 1.330	+2.7351	+ .0009	− .002	+22 11 47.78	−15.741	+ .254	− .01	4	18.98
6042	Wi (1) 14h 551	F8	6.62	6.85	33 25.692	3.0347	+ .0072	− .0037	+ 2 37 32.11	15.719	.281	− .070	4	17.99
6043	BD+51° 1937	F5	8.27	7.8	33 43.796	2.0245	− .0007	− .008	+51 36 22.75	15.702	.192	+ .01	4	19.68
6044	BD+61° 1443		9.25	9.2	34 1.89	1.5354	+ .0089	+ .001	+61 34 36.42	15.685	.146	+ .01	4	18.56
6045	BD+18° 2904		9.66		34 8.465	2.7965	+ .0020	− .001	+18 21 9.20	15.680	.261	− .08	4	18.30
6046	BD+32° 2497	F0	8.0	7.25	14 34 10.956	+2.5531	− .0012	− .0034	+31 57 44.45	−15.678	+ .238	− .049	4	18.49
6047	BD+69° 758	K0	9.20	9.29	34 11.83	0.8583	+ .0365	− .0015	+69 23 24.90	15.677	.085	− .027	4	19.56
6048	BD+48° 2223		9.2	8.5	34 12.884	2.1526	− .0017	− .002	+47 50 54.40	15.676	.202	+ .07	4	18.52
6049	BD+13° 2826		8.5	8.7	34 15.244	2.8781	+ .0035	.000	+13 9 4.14	15.674	.267	− .05	4	18.57
6050	BD+ 5° 2899	G5	8.6	8.25	34 24.579	2.9968	+ .0062	+ .0033	+ 5 12 2.00	15.666	.280	− .043	4	18.53
6051	BD+25° 2806	G0	8.8	8.81	14 34 41.850	+2.6743	+ .0001	− .0016	+25 30 9.76	−15.649	+ .251	− .014	4	18.50
6052	BD+20° 3000	G0	8.4	8.33	34 46.500	2.7653	+ .0014	− .004	+20 12 5.28	15.645	.259	+ .02	4	19.61
6053	BD−19° 3923	K2	8.5	7.88	34 47.353	3.3766	+ .0182	− .0059	−20 0 43.87	15.645	.315	− .007	4	19.31
6054	CD−28° 10858	A0	8.2		35 1.714	3.5927	+ .0242	− .0045	−28 16 27.36	15.632	.328	− .017	4	19.34
6055	BD+31° 2638	K0	8.44	8.55	35 24.210	2.5670	− .0009	− .0030	+31 6 1.24	15.611	.242	+ .026	4	19.23
6056	BD− 9° 3977	G0	8.7	8.9	14 35 28.015	+3.2146	+ .0125	− .013	− 9 36 20.61	−15.607	+ .302	+ .01	4	19.33
6057	BD+10° 2718		9.54		35 33.080	2.9172	+ .0045	− .003	+10 29 53.84	15.603	.275	.00	4	19.28
6058	BD+16° 2677		9.28		35 40.586	2.8361	+ .0028	+ .002	+15 44 30.23	15.596	.267	+ .03	4	18.87
6059	Pi 14h 156	A0	5.52	5.8	35 42.885	1.9012	+ .0011	+ .0017	+54 22 7.19	15.594	.181	− .023	5	18.92
6060	BD+27° 2404 br.	F2	8.45	8.4	35 48.098	2.6419	− .0001	+ .0007	+27 9 1.16	15.589	.249	− .035	4	18.54

6060. 12m6, 1″6, 107°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6061	33 Bootis	A0	5. 39	5. 07	14 35 51. 569	+2. 2397	−0. 0019	−0. 0069	+44 44 57. 77	−15. 586	+0. 212	−0. 029	4	19. 23
6062	BD+74° 587	F5	8. 67	8. 03	35 51. 82	0. 0156	+ . 0930	+ . 0095	+74 37 46. 67	15. 586	. 008	− . 003	[illegible]	18. 33
6063	Lac 6038	A0	5. 75		36 6. 204	3. 6794	+ . 0313	− . 0014	−35 47 30. 00	15. 572	. 345	+ . 018	4	20. 29
6064	BD+62° 1358		*9. 02*	8. 4	36 21. 47	1. 4862	+ . 0103	− . 009	+62 1 39. 99	15. 558	. 143	+ . 02	[illegible]	18. 80
6065	BD−21° 3946	A3	7. 09	7. 32	36 32. 736	3. 4182	+ . 0197	− . 002	−22 16 32. 85	15. 548	. 321	. 00	[illegible]	18. 86
6066	BD+ 2° 2850		*9. 52*		14 36 35. 473	+3. 0385	+ . 0073	− . 0021	+ 2 19 28. 48	−15. 545	+ . 287	. 000	[illegible]	18. 61
6067	π^1 Bootis *n. pr.*	A0	4. 94	5. 0	36 57. 932	2. 8181	+ . 0025	+ . 0011	+16 45 38. 23	15. 524	. 265	+ . 002	4	19. 31
6068	BD+65° 1004		*9. 25*		37 8. 01	1. 2265	+ . 0191	+ . 0035	+65 23 18. 63	15. 515	. 120	+ . 015	4	18. 54
6069	ζ Bootis *m.*	A2	3. 86	4. 49	37 19. 584	2. 8604	+ . 0033	+ . 0038	+14 4 14. 75	15. 506	. 271	− . 027	4	20. 03
6070	BD− 1° 2973	A2	7. 6	7. 76	37 22. 227	3. 0978	+ . 0089	− . 0025	− 1 41 54. 98	15. 502	. 293	− . 016	4	19. 33
6071	BD+34° 2551	A3	8. 62	8. 47	14 37 24. 249	+2. 4877	− . 0014	− . 001	+34 37 20. 03	−15. 500	+ . 237	+ . 01	4	18. 56
6072	BD+30° 2549		*9. 08*	9. 4	37 36. 682	2. 5882	− . 0006	− . 0003	+29 44 5. 69	15. 489	. 247	− . 004	4	18. 81
6073	BD+ 1° 2964	G5	8. 11	8. 28	37 40. 204	3. 0618	+ . 0079	− . 0005	+ 0 44 4. 52	15. 486	. 290	− . 003	4	19. 42
6074	BD−13° 3957	G5	8. 3	7. 80	37 40. 529	3. 2766	+ . 0145	− . 0039	−13 30 44. 85	15. 485	. 310	− . 023	4	19. 56
6075	BD−11° 3789	K0	7. 10	7. 19	37 41. 627	3. 2514	+ . 0135	. 0000	−11 53 36. 60	15. 484	. 307	. 000	4	19. 10
6076	Brad 1879	G5	5. 63	5. 86	14 37 52. 858	+2. 8921	+ . 0040	− . 0117	+12 0 16. 89	−15. 474	+ . 274	− . 112	4	18. 94
6077	BD+25° 2816	G5	7. 61	7. 76	38 11. 859	2. 6781	+ . 0004	− . 0048	+24 52 47. 91	15. 456	. 255	− . 022	4	19. 80
6078	Lal 26760	K0	7. 00	6. 82	38 15. 567	3. 3653	+ . 0175	− . 0030	−18 58 17. 33	15. 453	. 319	− . 007	[illegible]	19. 80
6079	BD− 5° 3934	F5	8. 5	8. 29	38 27. 382	3. 1566	+ . 0106	− . 003	− 5 37 27. 46	15. 442	. 301	+ . 04	[illegible]	19. 56
6080	BD+53° 1728 *br.*	F8	*8. 47*	8. 61	38 45. 147	1. 9407	+ . 0005	+ . 005	+52 59 18. 35	15. 426	. 187	. 00	4	18. 88
6081	c^1 Centauri	K0	4. 13		14 38 45. 527	+3. 6665	+ . 0302	− . 0062	−34 49 48. 03	−15. 425	+ . 349	− . 193	4	19. 80
6082	μ Virginis	F5	3. 95	3. 92	38 50. 500	3. 1521	+ . 0105	+ . 0071	− 5 18 39. 64	15. 420	. 301	− . 322	76 38	19. 95 19. 05
6083	BD+70° 799	K0	*8. 10*	8. 02	38 55. 41	0. 7030	+ . 0438	+ . 0049	+70 10 40. 11	15. 416	. 072	+ . 025	4	19. 56
6084	BD+40° 2808	K0	8. 07	8. 38	39 3. 816	2. 3618	− . 0018	− . 001	+39 44 50. 50	15. 408	. 227	+ . 07	7	21. 06
6085	CD−24° 11641	K5	9. 8		39 6. 971	3. 4650	+ . 0212	− . 0040	−24 38 43. 69	15. 405	. 330	− . 011	4	18. 43
6086	BD− 3° 3661		9. 7		14 39 12. 806	+3. 1362	+ . 0100	− . 0038	− 4 14 33. 46	−15. 400	+ . 299	− . 016	4	19. 57
6087	BD+41° 2521		*8. 9*		39 23. 172	2. 3154	− . 0017	− . 004	+41 29 29. 40	15. 390	. 223	− . 01	4	19. 25
6088	BD+71° 692	K2	*9. 20*	9. 1	39 27. 40	0. 5201	+ . 0545	− . 0052	+71 27 1. 54	15. 386	. 058	− . 005	4	19. 97
6089	BD+50° 2105	G	*9. 55*	9. 3	39 33. 907	2. 0347	− . 0003	− . 002	+50 27 16. 73	15. 380	. 197	+ . 02	4	18. 85
6090	34 Bootis	Ma	4. 93	5. 11	39 54. 367	2. 6378	+ . 0001	− . 0008	+26 52 2. 12	15. 361	. 253	− . 021	4	20. 52
6091	Lal 26826	F5	6. 60	6. 92	14 39 58. 964	+3. 1921	+ . 0117	− . 0143	− 7 54 54. 13	−15. 356	+ . 306	+ . 065	4	19. 09
6092	BD−16° 3929	K2	8. 1	7. 94	40 2. 303	3. 3278	+ . 0161	− . 0005	−16 32 10. 28	15. 353	. 319	− . 004	4	19. 38
6093	BD+36° 2522		*9. 75*		40 25. 433	2. 4344	− . 0014	+ . 002	+36 33 18. 50	15. 332	. 235	+ . 01	4	20. 05
6094	BD− 9° 3986	F2	6. 84	6. 1	40 27. 885	3. 2147	+ . 0123	− . 006	− 9 21 54. 29	15. 329	. 309	− . 03	4	20. 10
6095	BD+19° 2850	G5	7. 46	7. 96	40 29. 576	2. 7795	+ . 0022	− . 0040	+18 48 14. 40	15. 328	. 267	− . 175	4	19. 29
6096	BD+ 9° 2937	F8	*8. 63*	8. 77	14 40 43. 362	+2. 9298	+ . 0049	− . 006	+ 9 24 36. 34	−15. 315	+ . 282	− . 07	4	19. 21
6097	BD+61° 1452 *m.*		*8. 77*	8. 96	40 48. 49	1. 5250	+ . 0092	− . 007	+60 52 6. 79	15. 310	. 150	− . 01	4	19. 78
6098	BD+48° 2231		*9. 04*	8. 6	41 2. 190	2. 1116	− . 0009	− . 001	+48 3 29. 30	15. 297	. 206	− . 12	4	19. 84
6099	BD−17° 4171	K2	8. 6		41 20. 644	3. 3538	+ . 0169	− . 0020	−18 0 15. 48	15. 280	. 323	− . 044	4	19. 49
6100	ε Bootis *br.*	K0	2. 70	2. 79	41 29. 557	2. 6238	+ . 0001	− . 0036	+27 24 39. 17	15. 271	. 254	+ . 008	48 30	19. 61 19. 56
6101	Lal 26855	K0	5. 91	5. 87	14 41 30. 959	+3. 4369	+ . 0200	− . 0006	−22 48 54. 54	−15. 270	+ . 332	− . 057	4	19. 24
6102	BD+66° 867		*8. 72*	8. 1	41 36. 58	1. 1062	+ . 0236	+ . 002	+66 13 43. 18	15. 265	. 111	− . 01	4	19. 04
6103	BD+ 7° 2836	G5	9. 4		41 40. 214	2. 9632	+ . 0056	− . 012	+ 7 12 6. 48	15. 261	. 287	+ . 08	[illegible]	19. 56
6104	BD+58° 1525	G0	*10. 02*		41 48. 272	1. 6612	+ . 0059	− . 003	+58 26 22. 66	15. 254	. 164	− . 01	4	19. 35
6105	Wi (2) 14^h 839	Ma	6. 47	5. 87	41 52. 860	+2. 5067	− . 0009	+ . 0030	+33 7 36. 03	15. 250	+ . 244	− . 083	[illegible]	19. 02
6106	BD+79° 453		*9. 07*	8. 9	14 42 6. 75	−1. 5791	+ . 2568	+ . 0080	+79 25 33. 87	−15. 236	− . 143	+ . 041	[illegible]	19. 81
6107	109 Virginis	A0	3. 76	3. 92	42 12. 145	+3. 0389	+ . 0074	− . 0076	+ 2 13 45. 59	15. 231	+ . 294	− . 038	46 41	19. 87 20. 28
6108	Pi 14^h 178	Mb	6. 10	6. 0	42 19. 714	2. 8322	+ . 0031	− . 0046	+15 28 2. 19	15. 224	. 275	+ . 011	[illegible]	18. 76
6109	BD+42° 2531 *m.*	F5	7. 24	7. 35	42 28. 668	2. 2694	− . 0013	− . 0104	+42 43 2. 75	15. 215	. 222	+ . 067	5	19. 81
6110	CD−27° 10049	G5	8. 6		42 28. 740	3. 5349	+ . 0238	− . 0059	−27 58 49. 53	15. 215	. 342	− . 047	4	19. 23
6111	BD+38° 2589	G0	*8. 52*	8. 90	14 42 34. 038	+2. 3909	− . 0013	− . 0065	+38 4 17. 55	−15. 210	+ . 234	+ . 022	4	18. 79
6112	BD+21° 2685	F5	*9. 08*	8. 9	42 35. 428	2. 7346	+ . 0016	− . 003	+21 13 31. 84	15. 209	. 266	− . 02	[illegible]	19. 27
6113	Brad 1886	G5	5. 39	5. 40	43 4. 321	3. 4937	+ . 0220	+ . 0022	−25 45 10. 44	15. 181	. 340	− . 003	4	19. 06
6114	CD−29° 11321 *m.*	G5	8. 58	7. 93	43 23. 971	3. 5789	+ . 0255	− . 0034	−30 4 50. 78	15. 163	. 347	+ . 022	[illegible]	19. 10
6115	BD+31° 2658	G0	8. 8	8. 8	43 24. 160	2. 5451	− . 0004	− . 0058	+31 6 51. 73	15. 163	. 250	− . 025	4	19. 04
6116	BD−10° 3964	G0	9. 6		14 43 31. 895	+3. 2460	+ . 0132	− . 0021	−11 12 32. 50	−15. 155	+ . 315	− . 088	4	19. 35
6117	BD+39° 2800		*9. 41*		43 37. 921	+2. 3491	− . 0012	+ . 001	+39 35 8. 65	15. 149	+ . 231	+ . 01	5	20. 48
6118	BD+76° 534		*9. 18*	9. 4	43 48. 00	−0. 4820	+ . 1300	− . 0022	+76 9 31. 69	15. 140	− . 040	+ . 014	5	19. 28
6119	BD+27° 2421	G5	*9. 37*	8. 9	43 58. 579	+2. 6184	+ . 0003	− . 0071	+27 23 55. 62	15. 130	+ . 257	− . 019	4	18. 85
6120	BD+ 5° 2925	K0	9. 2	9. 2	44 7. 022	2. 9916	+ . 0064	− . 0011	+ 5 16 59. 21	15. 122	. 293	+ . 020	4	19. 21

6067. 5^{m}81, 5″9, 105°.
6069. 4^{m}4-4^{m}8, 0″9, 138°.
6080. 11^{m}1, 2″4, 229°.
6097. 9^{m}2-10^{m}1, 0″9, 315°.
6100. 5^{m}12, 2″8, 333°.
6109. 7^{m}8-8^{m}3, 0″5, 87°.
6114. 9^{m}0-10^{m}0, 0″2, 167°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6121	BD+64° 1026		*9.20*		14 44 22.22	+1.2858	+0.0166	−0.005	+63 49 26.57	−15.107	+0.130	−0.01	4	19.79
6122	BD+ 3° 2939	G0	*8.38*	8.30	44 27.904	3.0170	+ .0070	− .0037	+ 3 37 44.88	15.101	.296	− .016	4	19.54
6123	BD+51° 1952	M0	*9.00*	8.8	44 28.865	1.9821	+ .0007	+ .001	+51 8 16.98	15.101	.196	− .04	4	18.88
6124	BD+24° 2778	K0	*8.40*	8.56	44 31.242	2.6845	+ .0010	− .001	+23 49 43.66	15.098	.263	+ .01	4	18.73
6125	Wi (1) 14^h 772	A0	6.06	6.6	44 47.374	3.0806	+ .0085	− .0005	− 0 30 55.71	15.083	.302	+ .025	4	18.76
6126	μ Libræ *m.*	A2	5.38	6.17	14 44 55.720	+3.2893	+ .0145	− .0042	−13 48 59.02	−15.075	+ .322	− .025	4	20.10
6127	BD−19° 3966	A3	7.06	7.11	44 56.159	3.3859	+ .0178	.0000	−19 34 17.91	15.074	.331	− .012	4	19.45
6128	BD+50° 2118	G5	8.2	8.40	45 4.919	2.0262	+ .0003	− .006	+49 53 37.44	15.066	.200	− .05	4	19.62
6129	BD− 5° 3953	K2	8.1	7.94	45 8.582	3.1570	+ .0105	− .0022	− 5 27 33.16	15.062	.310	− .019	4	19.86
6130	BD+72° 652	A5	7.40	7.48	45 25.19	0.3061	+ .0658	− .0042	+72 17 58.83	15.051	.036	+ .037	4	19.10
6131	BD+43° 2437	K0	*9.47*		14 45 29.486	+2.2452	− .0011	− .004	+43 7 54.60	−15.042	+ .223	+ .06	4	19.82
6132	BD+ 2° 2869	K0	*7.83*	7.61	45 34.762	3.0444	+ .0076	− .0038	+ 1 50 10.23	15.038	.299	− .007	4	19.29
6133	BD−12° 4141	F0	7.88	7.8	45 36.533	3.2796	+ .0141	− .0036	−13 10 37.53	15.036	.322	− .006	4	19.70
6134	CD−23° 11924	G5	9.2		45 40.558	3.4681	+ .0208	− .0030	−24 5 48.50	15.032	.341	+ .004	4	19.44
6135	295 B Bootis	F0	5.98	6.00	45 58.230	2.3775	− .0010	− .0216	+38 8 25.23	15.015	.236	+ .105	4	19.78
6136	BD+11° 2731		*9.63*		14 46 0.171	+2.8980	+ .0045	+ .004	+11 9 36.44	−15.013	+ .287	+ .06	4	19.64
6137	BD− 3° 3679		9.9	8.8	46 6.229	3.1276	+ .0097	+ .0054	− 3 32 30.80	15.007	.309	− .059	4	19.88
6138	BD+12° 2751	G0	*8.05*	8.42	46 10.459	2.8735	+ .0041	.000	+12 40 5.37	15.003	.284	− .09	4	19.12
6139	8 Libræ	F5	5.33	5.5	46 15.499	3.3214	+ .0154	− .0071	−15 39 55.30	14.998	.328	− .078	4	19.41
6140	α Libræ	A3	2.90	3.09	46 26.963	3.3223	+ .0155	− .0074	−15 42 36.47	14.987	.328	− .076	66 59	20.61 20.80
6141	BD+68° 801	K0	*9.42*	8.3	14 46 28.05	+0.8432	+ .0346	− .0212	+68 17 36.46	−14.986	+ .088	+ .012	4	18.76
6142	Pi 14^h 193	A2	5.66	5.27	46 31.698	2.5817	+ .0001	+ .0017	+28 56 47.66	14.982	.256	− .009	4	18.56
6143	BD+17° 2790	F8	9.2	9.5	46 32.428	2.7990	+ .0028	+ .001	+17 8 10.24	14.982	.277	− .02	4	19.27
6144	BD+47° 2177	F8	7.56	7.38	46 44.552	2.1227	− .0004	+ .0093	+46 54 31.97	14.970	.212	− .165	4	19.19
6145	BD+57° 1537	G0	*9.47*		47 8.035	1.6917	+ .0054	− .009	+57 11 12.28	14.947	.171	.00	4	18.89
6146	Grmb 2154	K0	5.50	5.33	14 47 20.152	+2.3863	− .0009	− .0181	+37 35 58.76	−14.935	+ .238	+ .085	4 5	17.86 18.58
6147	BD+55° 1712	G5	*8.87*		47 28.996	1.7974	+ .0034	+ .001	+55 1 44.07	14.927	.182	− .04	4	18.32
6148	BD+22° 2756		9.0	8.9	47 34.428	2.7007	+ .0015	− .001	+22 37 45.16	14.921	.269	− .01	4	18.91
6149	BD−17° 4202	F8	8.5	8.44	47 38.517	3.3541	+ .0165	− .0001	−17 29 55.13	14.917	.333	− .039	4	19.23
6150	ξ Bootis *br.*	G5	4.80	4.90	47 41.703	2.7577	+ .0022	+ .0092	+19 25 56.32	14.914	.275	− .106	4	19.55
6151	Lac 6127	G0	6.43	6.43	14 47 46.857	+3.5936	+ .0254	− .0263	−30 14 53.22	−14.910	+ .356	− .026	4	19.58
6152	BD+ 9° 2950	K0	*7.64*	7.57	48 1.930	2.9286	+ .0051	− .010	+ 9 9 15.92	14.894	.292	− .04	4	19.29
6153	BD−15° 3976	K2	8.3	8.01	48 11.990	3.3305	+ .0156	− .0024	−16 4 11.48	14.885	.331	+ .003	4	18.59
6154	BD+15° 2781	K5	8.24	7.8	48 30.053	+2.8356	+ .0035	− .006	+14 49 8.51	14.867	+ .283	− .01	4	18.88
6155	BD+77° 560		*9.08*	8.9	48 37.37	−0.8599	+ .1614	− .0144	+77 9 9.60	14.860	− .078	− .044	4	18.80
6156	BD+73° 645	F8	*8.75*	8.8	14 48 55.00	+0.1173	+ .0769	+ .0005	+73 5 45.15	−14.843	+ .018	+ .044	5	19.03
6157	BD− 6° 4007	F5	*8.9*	8.3	48 56.773	3.1816	+ .0112	− .002	− 6 54 37.34	14.841	.318	+ .03	4	19.30
6158	BD− 9° 4020	F0	9.6		49 9.453	3.2218	+ .0123	.000	− 9 25 2.18	14.829	.323	+ .03	4	19.04
6159	BD+32° 2523	K0	7.14	6.92	49 23.369	2.5047	− .0002	.000	+32 15 8.40	14.815	.251	− .03	4	19.26
6160	61 B Draconis	K2	5.67	5.58	49 24.474	1.5371	+ .0090	− .0169	+59 37 7.17	14.814	.157	+ .126	4	18.75
6161	BD+18° 2951	K0	7.92	8.01	14 49 41.054	+2.7700	+ .0025	+ .003	+18 33 45.26	−14.797	+ .279	− .05	4	19.03
6162	Wi (1) 14^h 880	K0	6.69	7.30	49 42.205	2.9689	+ .0060	− .0028	+ 6 34 4.15	14.796	.297	+ .008	5 4	20.38 21.87
6163	CD−27° 10116		9.8		49 55.644	3.5493	+ .0233	− .0040	−27 50 20.02	14.783	.356	− .030	4	19.55
6164	ξ^{1} Libræ	K0	5.84	6.0	50 2.096	3.2576	+ .0133	− .0042	−11 34 21.64	14.777	.326	− .022	4	19.83
6165	BD+25° 2845	F8	*8.86*	8.9	50 6.881	2.6485	+ .0011	− .0062	+25 9 18.59	14.772	.267	+ .017	4	18.89
6166	BD− 7° 3921	K0	7.48	7.28	14 50 12.334	+3.2007	+ .0116	+ .002	− 8 3 46.61	−14.767	+ .322	+ .04	4	19.20
6167	BD+44° 2400	F2	9.2	9.1	50 14.978	2.1995	− .0005	+ .006	+44 0 36.35	14.764	.223	− .06	4	18.91
6168	CD−24° 11740	G5	10.5	ft.	50 20.622	3.4925	+ .0211	− .0075	−24 54 9.89	14.759	.351	− .070	4	19.35
6169	BD+35° 2622		*9.48*	9.5	50 28.115	2.4441	− .0004	.000	+34 47 21.29	14.751	.247	− .03	4	18.56
6170	BD+13° 2864		[illegible]		50 47.144	2.8567	+ .[illegible]	.000	+13 24 35.00	14.732	.288	.00	4	19.29
6171	Lac 6146	A0	5.34		14 50 49.782	+3.6733	+ .0283	+ .0016	−33 31 53.42	−14.729	+ .370	− .013	4	19.89
6172	β Urs Min	K5	2.24	3.10	50 55.41	0.1932	+ .0987	− .0074	+74 28 57.24	14.724	− .013	+ .005	8	18.88
6173	BD+ 1° 3002	G5	*8.63*	8.58	51 28.282	+3.0560	+ .0080	+ .0003	+ 1 3 20.30	14.692	+ .310	+ .006	4	18.64
6174	BD−21° 3994	K0	8.1	8.34	51 48.990	3.4344	+ .0189	− .0035	−21 39 44.79	14.671	.348	− .014	4	19.14
6175	BD+33° 2511	K	8.45	8.90	52 4.862	2.4739	− .0001	− .004	+33 17 49.87	14.655	.252	− .01	4	18.80
6176	BD+60° 1572	K2	7.31	7.06	14 52 6.115	+1.5098	+ .0098	− .004	+59 50 20.39	−14.654	+ .156	− .01	4	18.41
6177	BD−19° 3985	F8	10.0		52 6.509	3.3973	+ .0177	− .011	−19 35 44.81	14.654	.344	− .03	4	19.82
6178	ξ^{2} Libræ	K0	5.63	5.09	52 25.454	3.2517	+ .0130	− .0001	−11 5 15.14	14.635	.330	− .002	75 59	19.93 20.31
6179	321 B Bootis	A0	5.77	[illegible]	52 26.576	2.8319	+ .0036	− .0013	+14 46 8.41	14.634	.288	− .016	4	18.23
6180	BD+62° 1375	K5	*8.17*	8.06	52 28.[illegible]	1.3197	+ .0150	− .005	+62 28 39.54	14.632	.138	.00	4	19.30

6126. 5.8–6.6, 1.7, 345°.

6150. 4.8–6.8, 2.3, 70°; 153 yrs., for c. g. add +.077, +.737 (1919.55), p. m. is for c. g.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6181	BD+38° 2603	A0	*8.68*	8.78	14 52 36.053	+2.3510	−0.0004	0.000	+38 17 49.16	−14.624	+0.241	0.00	7	20.73
6182	43 B Libræ *br.*	K5	6.00	5.86	52 47.381	+3.4249	+ .0186	+ .0745	−21 3 19.28	14.613	+ .348	−1.752	4	19.90
6183	BD+85° 248		*8.76*	9.1	52 49.75	−8.890	+1.944	+ .001	+85 37 35.24	14.610	− .880	+ .016	4	20.06
6184	BD+49° 2337	G	8.9	8.6	52 51.020	+2.0030	+ .0011	− .004	+49 27 24.47	14.609	+ .206	− .02	4	19.56
6185	BD+30° 2587	F8	8.91	8.9	52 51.700	2.5487	+ .0004	− .0053	+29 47 49.85	14.609	.261	+ .005	4	19.23
6186	BD+ 4° 2939	K0	8.7	8.40	14 52 52.906	+3.0035	+ .0068	+ .0006	+ 4 19 22.26	−14.607	+ .306	− .034	4	19.02
6187	Lal 27273	A2	7.21	7.1	52 58.788	2.2639	− .0004	− .0014	+41 27 29.84	14.601	.233	+ .032	4	19.80
6188	BD+ 6° 2963	K0	7.9	7.37	53 5.763	2.9804	+ .0063	− .004	+ 5 45 10.01	14.594	.304	+ .01	4	19.59
6189	BD−13° 4026	A2	9.1	8.69	53 10.035	3.2907	+ .0142	+ .0012	−13 22 57.36	14.590	.335	− .020	4	19.03
6190	Brad 1908	K0	5.71	5.61	53 26.991	3.0702	+ .0083	+ .0041	+ 0 9 14.71	14.573	.313	− .031	4	19.47
6191	Wi (2) 14ʰ 1100	A0	6.24	6.7	14 53 27.292	+2.7043	+ .0018	− .0031	+21 52 38.67	−14.573	+ .277	− .047	4	19.08
6192	Pi 14ʰ 223	K0	6.77	6.97	53 36.619	3.3542	+ .0161	− .0043	−17 2 37.58	14.564	.342	− .008	4	19.23
6193	BD− 1° 2999	F8	8.9	8.8	53 48.492	3.0953	+ .0089	− .0027	− 1 24 34.41	14.552	.317	− .056	4	19.59
6194	CD−27° 10154	A0	10.5		54 21.666	3.5490	+ .0227	− .0032	−27 20 5.60	14.518	.363	− .022	5	18.28
6195	BD− 5° 3978		9.2		54 26.162	3.1611	+ .0105	− .0005	− 5 28 50.91	14.514	.324	− .009	4	18.45
6196	BD+67° 857		*10.20*		14 54 27.89	+0.8867	+ .0310	− .0002	+67 8 5.65	−14.512	+ .095	− .033	4	19.15
6197	Lal 27282	K2	6.77	6.76	54 29.262	2.8367	+ .0037	− .0026	+14 21 26.17	14.511	.291	+ .003	4	18.62
6198	BD+53° 1752	G0	*8.42*	8.58	54 29.286	1.8172	+ .0035	− .0024	+53 42 33.20	14.511	.189	− .219	4	19.34
6199	BD+30° 2593	K	*8.97*	9.1	54 29.896	2.5274	+ .0003	− .0045	+30 36 14.27	14.510	.260	+ .010	4	19.33
6200	BD+ 9° 2975	K0	8.6	8.77	54 48.193	2.9299	+ .0054	− .004	+ 8 47 40.68	14.492	.301	− .02	4	19.53
6201	BD+10° 2770	F8	8.4	8.37	14 55 1.686	+2.8985	+ .0049	− .005	+10 40 27.63	−14.478	+ .299	.00	4	19.19
6202	BD+17° 2806	G5	7.9	8.36	55 15.976	2.7784	+ .0030	− .003	+17 38 50.81	14.464	.287	− .06	4	19.29
6203	BD+41° 2543	F5	*8.53*	8.27	55 18.548	2.2565	− .0003	+ .001	+41 24 42.86	14.461	.234	+ .01	4	19.78
6204	BD− 2° 3923	F8	8.5	8.44	55 20.387	3.1183	+ .0094	− .0014	− 2 49 18.71	14.459	.321	− .012	4	19.40
6205	BD−15° 4005 *br.*	F0	9.1		55 21.614	3.3289	+ .0152	− .0040	−15 28 25.72	14.458	.343	− .011	4	19.12
6206	CD−23° 12009	F8	9.5		14 55 34.786	+3.4713	+ .0198	.0000	−23 16 33.74	−14.445	+ .358	− .005	4	19.56
6207	Grmb 2196	G0	5.73	5.82	55 37.24	−4.3059	+ .6628	+ .0902	+82 50 29.04	14.442	− .429	− .241	8	19.93
6208	BD+50° 2127	K5	*7.52*	7.65	55 42.142	+1.9512	+ .0019	+ .003	+50 25 24.58	14.437	+ .203	− .02	4	18.89
6209	BD+46° 2011	G5	*8.78*	8.87	55 47.632	2.1014	+ .0005	− .005	+46 19 23.00	14.432	.219	− .01	4	19.58
6210	BD+20° 3051	K0	*8.52*	8.38	55 50.001	2.7224	+ .0022	.000	+20 41 22.09	14.429	.282	− .01	4	18.76
6211	BD+12° 2770	F5	8.5	9.11	14 56 9.982	+2.8695	+ .0044	− .003	+12 20 28.88	−14.409	+ .297	+ .02	4	18.83
6212	2 H Urs Min	Mb	4.86	4.97	56 18.40	0.9600	+ .0275	− .0124	+66 15 2.94	14.401	.104	+ .032	12	19.22
6213	δ Libræ	A0	Var.		56 41.743	3.2069	+ .0117	− .0046	− 8 12 8.04	14.377	.332	− .011	4	18.90
6214	BD+ 6° 2971	K2	8.7	8.4	56 43.128	2.9691	+ .0062	− .002	+ 6 20 55.17	14.376	.308	.00	4	18.79
6215	BD+52° 1841	G5	*10.00*		56 56.554	1.8712	+ .0028	.000	+52 11 33.96	14.362	.196	− .12	4	19.26
6216	BD−18° 3950	K2	8.7	7.4	14 56 58.722	+3.3928	+ .0171	+ .0006	−18 56 52.05	−14.360	+ .351	+ .016	4	18.55
6217	CD−25° 10661	F8	8.6	8.35	57 3.444	3.5252	+ .0216	− .0110	−25 52 53.56	14.354	.365	− .020	4	18.84
6218	BD+45° 2244	K0	6.98	7.5	57 12.542	2.1425	+ .0004	− .0075	+44 54 11.16	14.346	.224	− .009	4	18.79
6219	BD+26° 2640	F8	*8.9*	8.9	57 25.778	2.6147	+ .0013	+ .0003	+26 6 51.47	14.332	.273	+ .001	4	18.83
6220	BD+31° 2684	Ma	8.2	8.3	57 38.308	2.4953	+ .0004	− .0050	+31 41 39.23	14.319	.261	− .052	4	18.78
6221	BD+24° 2810	G0	9.5	8.4	14 57 45.471	+2.6529	+ .0016	+ .0048	+24 9 56.07	−14.312	+ .277	+ .048	4	18.76
6222	Wi (1)14ʰ 1014	G5	6.85	6.63	57 47.612	3.2047	+ .0116	− .0021	− 8 1 48.33	14.310	.332	+ .012	4	18.54
6223	BD+64° 1040		*9.30*		57 50.82	1.1494	+ .0202	− .0065	+64 2 59.87	14.306	.123	+ .038	4	18.31
6224	BD+15° 2808	F0	8.5	8.58	58 29.882	2.8141	+ .0036	− .002	+15 23 59.13	14.266	.294	+ .01	4	18.20
6225	CD−29° 11491	A3	9.8		58 34.140	3.6042	+ .0243	− .0042	−29 30 35.58	14.262	.375	− .012	4	18.56
6226	BD+19° 2910	G5	8.80	8.96	14 58 40.495	+2.7362	+ .0025	− .005	+19 42 18.33	−14.256	+ .287	− .02	4	18.55
6227	BD−10° 4017		9.8		58 42.125	3.2588	+ .0130	− .0017	−11 12 10.79	14.254	.340	.000	4	18.81
6228	BD+ 2° 2905	K0	4.62	4.80	58 51.388	3.0332	+ .0075	− .0036	+ 2 24 17.35	14.245	.317	+ .003	5 4	17.53 18.14
6229	β Bootis	G5	3.63	3.95	58 55.910	2.2636	+ .0001	− .0040	+40 42 19.89	14.240	.238	− .043	4	19.08
6230	γ Scorpii	Mb	3.41	4.12	59 23.009	3.5115	+ .0209	− .0056	−24 58 6.10	14.212	.367	− .055	4	18.71
6231	BD+55° 1728	K0	*8.72*	8.6	14 59 25.534	+1.6994	+ .0057	− .002	+55 32 14.75	−14.210	+ .181	− .03	4	18.07
6232	BD+28° 2391	A0	6.90	7.20	14 59 41.480	2.5586	+ .0009	− .0004	+28 34 48.55	14.193	.270	+ .002	4	18.01
6233	BD− 0° 2921	A0	7.9	7.99	15 0 17.506	3.0825	+ .0086	+ .0001	− 0 35 37.45	14.156	.324	− .015	4	17.95
6234	9 Urs Min	G0	6.66	6.39	0 20.05	0.1467	+ .0686	− .0842	+72 4 40.55	14.153	.021	+ .084	8	19.14
6235	BD+45° 2253	F8	*8.87*	8.43	0 48.943	2.1146	+ .0008	− .0190	+45 17 42.69	14.123	.224	+ .262	4	18.36
6236	BD+37° 2604		*9.60*		15 0 54.480	+2.3539	+ .0002	+ .001	+37 9 8.69	−14.118	+ .249	+ .01	4	18.33
6237	ψ Bootis	K0	4.67	4.90	1 1.005	2.5837	+ .0012	− .0133	+27 15 32.22	14.111	.273	− .020	4	18.61
6238	i Bootis *s. f.*	G0	5.28	5.5	1 9.260	2.0193	+ .0015	− .0406	+47 57 55.48	14.103	.215	+ .028	4	19.30
6239	BD+56° 1780	K2	6.81	7.26	1 9.717	1.6460	+ .0067	− .0009	+56 20 55.10	14.102	.176	− .095	4	18.55
3240	Rad (45) 3900	K0	6.11	6.09	1 49.925	3.4522	+ .0186	+ .0044	−21 43 16.97	14.061	.364	− .060	4	18.88

6182. 8^m9, 19″, 297°.
6205. 14^m, 3″1, 326°.

6213. 5^m1 to 6^m3.
6238. 6^m08, 3″6, 245°; for c. g. add $-^s166$, −″77 (1919.30); p. m. is for c. g.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6241	CD−27° 10214		9.9		15 2 1.662	+ 3.5661	+0.0225	−0.0010	−27 22 0.96	−14.048	+0.377	−0.016	4	18.59
6242	Wi (1) 14^h 1099	A0	7.32	7.3	2 10.766	3.2859	+ .0135	+ .0001	−12 35 51.98	14.039	.348	− .012	4	18.88
6243	CD−23° 12063	G5	9.9		2 12.469	3.4838	+ .0196	+ .0049	−23 18 51.26	14.037	.369	− .058	4	19.30
6244	BD− 2° 3944		9.7	9.1	2 36.244	3.1205	+ .0095	− .0032	− 2 51 42.14	14.012	.331	− .034	4	18.70
6245	BD+29° 2621	Ko	*9.57*	9.2	2 41.813	+ 2.5360	+ .0009	+ .0010	+29 18 30.86	14.006	+ .270	+ .014	4	18.57
6246	57 B Urs Min	Ko	7.16		15 2 42.84	−19.192	+6.570	− .009	+87 32 28.32	−14.005	−1.995	+ .019	118 108	19.95 19.87
6247	BD+43° 2465		*9.55*		2 46.490	+ 2.1671	+ .0006	− .008	+43 26 26.53	14.001	+ .231	− .04	4	18.96
6248	Brad 1925 *br.*	A0	5.59	5.57	2 46.813	+ 1.9933	+ .0018	− .0062	+48 27 34.62	14.001	+ .214	+ .015	4	18.11
6249	BD+77° 568		*8.97*	8.9	3 5.93	− 1.2880	+ .1846	− .0006	+77 36 50.86	13.981	− .128	− .040	4	18.79
6250	BD+ 0° 3304	K0	*8.01*	7.83	3 19.128	+ 3.0671	+ .0083	− .0012	+ 0 20 11.96	13.967	+ .326	− .001	4	18.55
6251	BD+65° 1033		*9.13*		15 3 29.09	+ 1.0043	+ .0248	− .0362	+65 7 17.79	−13.957	+ .111	− .021	4	19.08
6252	BD+54° 1730	F2	*9.05*		3 35.422	1.7516	+ .0049	.000	+54 0 22.30	13.950	.189	+ .01	4	19.02
6253	Wi (2) 14^h 1310 *m.*	A0	6.00	6.56	3 40.260	2.7469	+ .0029	+ .0032	+18 45 0.95	13.945	.293	− .068	4	18.79
6254	BD+23° 2775	G5	7.7	7.85	3 41.863	2.6677	+ .0020	− .002	+22 52 21.31	13.944	.285	− .03	4	18.92
6255	Wi (1) 14^h 1141	G5	6.22	6.39	3 42.064	2.9751	+ .0065	− .0003	+ 5 48 19.85	13.943	.317	− .029	4	19.69
6256	BD−16° 4012	K0	8.5	8.29	15 3 45.182	+ 3.3624	+ .0157	− .0003	−16 47 7.86	−13.940	+ .358	− .056	4	19.60
6257	BD+36° 2574	G	*9.15*	8.8	3 45.391	2.3805	+ .0004	+ .001	+35 47 9.94	13.940	.256	− .11	4	19.38
6258	*c* Bootis	F0	5.03	4.90	3 47.125	2.6212	+ .0017	+ .0138	+25 10 48.76	13.938	.281	− .183	4	18.79
6259	BD+ 9° 3001	G0	8.7	8.42	3 55.722	2.9173	+ .0054	− .0358	+ 9 11 16.47	13.929	.312	− .069	4	19.42
6260	BD+ 3° 2984	G0	*9.08*		4 27.984	3.0141	+ .0071	− .0030	+ 3 29 3.70	13.895	.323	− .027	4	19.29
6261	BD+41° 2564	A0	*8.92*	8.9	15 4 34.168	+ 2.2315	+ .0005	.000	+41 7 20.01	−13.888	+ .240	− .01	4	19.29
6262	BD+46° 2031		9.4	8.4	4 49.251	2.0653	+ .0014	− .007	+46 14 40.82	13.873	.223	+ .01	4	20.02
6263	Brad 1926	K0	5.73	5.88	4 56.512	+ 2.5893	+ .0014	.0000	+26 36 26.16	13.865	+ .279	− .029	4	18.65
6264	BD+84° 339	K0	*8.18*	8.08	4 57.53	− 6.6675	+1.1254	+ .0101	+84 20 27.64	13.864	− .695	.000	4	19.61
6265	Lal 27628	K0	6.89	7.00	5 4.857	+ 2.4211	+ .0006	− .0025	+34 0 42.57	13.856	+ .261	+ .009	5	19.98
6266	CD−28° 11191		9.2		15 5 6.520	+ 3.6101	+ .0236	− .0040	−29 5 33.01	−13.855	+ .386	+ .028	4	19.46
6267	BD+14° 2840	A2	*8.99*		5 12.340	2.8326	+ .0041	− .004	+13 57 31.17	13.848	.305	.00	4	19.12
6268	BD− 8° 3913		9.4		5 16.214	3.2213	+ .0117	.000	− 8 44 18.08	13.844	.345	.00	4	19.87
6269	Wi (1) 15^h 10	K0	7.15	7.37	5 22.438	3.1588	+ .0103	− .0120	− 5 5 20.65	13.838	.338	− .074	4	19.57
6270	BD−15° 4038	A5	8.35	8.41	5 25.484	3.3391	+ .0149	− .0038	−15 24 7.00	13.835	.358	− .024	4	18.89
6271	Lac 6253	K0	5.94	5.5	15 5 34.478	+ 3.5453	+ .0213	− .0019	−26 1 43.02	−13.825	+ .380	− .019	4	19.52
6272	Grmb 2194	K0	6.27	6.85	5 47.115	1.9036	+ .0029	− .0017	+50 21 37.92	13.812	.207	− .032	4	18.77
6273	BD− 0° 2936	F0	7.68	7.68	5 51.678	3.0824	+ .0086	− .0027	− 0 34 33.14	13.807	.331	− .007	4	19.11
6274	BD+33° 2548	K0	*8.21*	8.27	5 54.984	2.4346	+ .0007	.000	+33 21 55.35	13.804	.262	− .01	4	18.86
6275	BD+18° 2980	G5	*9.22*	8.4	6 15.016	2.7570	+ .0032	− .001	+18 1 19.84	13.782	.298	− .03	4	19.37
6276	Grmb 2197	F2	6.75	7.03	15 6 18.82	+ 1.1326	+ .0199	− .0009	+63 25 19.47	−13.778	+ .126	+ .002	4	19.08
6277	BD+ 4° 2973	F8	*8.52*	8.8	6 21.835	2.9976	+ .0069	− .0044	+ 4 25 21.68	13.775	.323	− .013	4	19.04
6278	BD− 6° 4147	G0	8.5	8.4	6 25.569	3.1960	+ .0111	− .004	− 7 14 31.28	13.771	.344	+ .06	4	18.59
6279	BD−20° 4164	F5	8.9	8.7	6 56.744	3.4464	+ .0180	− .0056	−21 0 29.24	13.738	.371	− .030	4	19.05
6280	BD−10° 4050	K0	8.9	8.03	7 0.236	3.2576	+ .0126	− .0014	−10 45 13.74	13.734	.353	+ .023	4	19.06
6281	BD+25° 2880	K0	*9.04*	8.98	15 7 3.906	+ 2.6071	+ .0018	− .0020	+25 33 29.33	−13.731	+ .283	+ .022	4	18.30
6282	BD+11° 2777		*9.41*		7 21.560	2.8778	+ .0048	.000	+11 18 34.23	13.712	.311	+ .01	4	18.28
6283	BD+29° 2633	F5	7.11	7.17	7 31.730	2.5201	+ .0012	− .0004	+29 31 53.91	13.701	.272	− .023	4	18.59
6284	BD+60° 1593		*9.10*	8.6	7 37.66	1.3678	+ .0131	− .010	+60 12 49.31	13.695	.151	+ .01	4	19.09
6285	ι Libræ	A0	4.66	4.57	7 39.453	3.4181	+ .0170	− .0026	−19 29 23.42	13.693	.369	− .049	4	19.81
6286	BD+39° 2841	F8	8.1	8.47	15 8 8.855	+ 2.2737	+ .0007	− .010	+39 15 2.82	−13.661	+ .248	+ .04	4	19.11
6287	BD+75° 554		*9.36*		8 15.01	− 0.5496	+ .1122	+ .0051	+74 53 9.80	13.655	− .053	− .021	5	19.88
6288	BD−18° 4001	K5	8.9	8.2	8 22.517	+ 3.4066	+ .0167	.000	−18 59 33.09	13.647	+ .370	− .03	4	18.66
6289	BD+61° 1485		*9.35*		8 34.16	1.3057	+ .0147	− .006	+60 59 49.27	13.634	.145	− .01	4	19.01
6290	BD+49° 2361	F5	8.17	7.97	8 50.952	1.9448	+ .0026	+ .0021	+48 59 36.87	13.617	.214	− .027	4	19.47
6291	BD+ 7° 2914	F5	8.6	8.87	15 8 53.721	+ 2.9401	+ .0059	− .003	+ 7 41 57.76	−13.613	+ .321	+ .02	4	18.59
6292	BD− 4° 3832	A3	8.1	8.57	8 58.340	3.1476	+ .0100	− .0003	− 4 21 58.60	13.608	.343	− .005	4	19.51
6293	BD+ 2° 2928	K	8.9		9 6.362	3.0354	+ .0076	− .0008	+ 2 10 45.35	13.600	.331	− .012	4	19.28
6294	BD+15° 2831	K0	*9.12*	8.5	9 13.144	2.8076	+ .0039	+ .001	+15 6 13.35	13.593	.307	.00	4	19.11
6295	BD+20° 3080	K2	9.1	8.56	9 14.510	2.7131	+ .0028	.000	+20 6 26.54	13.591	.297	− .05	4 5	19.31 18.92
6296	BD−11° 3909	K0	8.5	8.32	15 9 24.016	+ 3.2831	+ .0132	− .0006	−12 4 53.71	−13.581	+ .358	+ .001	4	19.83
6297	BD+31° 2711		*8.69*	8.80	9 33.224	2.4667	+ .0010	− .0029	+31 38 20.22	13.571	.270	+ .025	4	19.07
6298	Brad 1929	F0	4.95	5.09	9 42.959	3.6692	+ .0251	+ .0003	−31 13 16.67	13.561	.400	− .018	4	19.90
6299	BD+42° 2575		*9.59*		9 47.997	2.1897	+ .0010	− .009	+41 53 27.43	13.555	.241	− .07	5	19.71
6300	BD+16° 2752	K0	8.5	8.7	9 48.798	2.7863	+ .0037	.000	+16 13 14.68	13.554	.306	+ .01	4	19.28

6248. 14$^{\mathrm{m}}$, 5″8, 254°.

6253. 6$^{\mathrm{m}}$9–6$^{\mathrm{m}}$9, 0″1.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6301	BD+12° 2809	K5	8.5	8.5	15 9 57.028	+2.8572	+0.0046	−0.004	+12 20 20.39	−13.546	+0.311	+0.03	4	19.34
6302	BD+57° 1556	G5	*9.32*	9.25	10 19.358	1.5342	+ .0090	− .002	+57 19 51.45	13.522	.171	+ .01	4	19.85
6303	BD−22° 3923	K5	9.1	8.30	10 29.264	3.4840	+ .0188	− .0012	−22 37 13.92	13.511	.381	+ .021	4	19.88
6304	BD−14° 4156	F5	9.91		10 54.926	3.3409	+ .0146	− .0020	−15 10 33.79	13.483	.366	− .004	4	19.71
6305	BD+24° 2831		*9.45*		10 56.485	2.6178	+ .0020	+ .0013	+24 42 5.10	13.481	.288	− .030	4	19.57
6306	BD− 2° 3962		10.1		15 11 1.655	+3.1175	+ .0092	+ .0005	− 2 35 24.50	−13.476	+ .342	− .052	4	19.59
6307	BD+71° 716	K2	*8.78*	8.82	11 2.10	0.1481	+ .0632	− .0050	+71 18 38.43	13.475	.022	+ .007	4	19.24
6308	CD−26° 10783	F2	8.1	7.66	11 6.778	3.5710	+ .0215	+ .0021	−26 43 34.68	13.470	.391	− .039	4	20.44
6309	Grmb 2205	A5	6.55	7.00	11 8.556	2.1386	+ .0013	− .0074	+43 20 39.33	13.468	.237	+ .050	4	19.29
6310	BD+21° 2741	M2	*8.32*	8.3	11 11.568	2.6801	+ .0026	− .002	+21 37 54.50	13.465	.296	− .02	4	19.81
6311	3 Serpentis	K0	5.44	5.16	15 11 12.632	+2.9820	+ .0066	− .0014	+ 5 14 8.11	−13.464	+ .327	− .009	81 35	19.81 20.27
6312	BD− 6° 4162	F2	9.2		11 19.946	3.1919	+ .0108	− .002	− 6 51 39.06	13.456	.352	+ .04	4	19.24
6313	CD−24° 11963	F5	9.7		11 34.061	3.5269	+ .0202	+ .0002	−24 36 52.96	13.441	.387	+ .005	4	19.92
6314	BD+58° 1557	K0	*9.35*	9.1	11 35.172	1.4507	+ .0109	.000	+58 33 50.82	13.440	.163	+ .02	4	19.35
6315	BD+ 7° 2926	K0	6.64	6.2	11 56.982	2.9550	+ .0062	− .002	+ 6 45 37.91	13.416	.325	+ .01	4	19.10
6316	BD+66° 897		*8.80*	9.14	15 12 0.61	+0.8341	+ .0299	− .0002	+66 4 34.02	−13.412	+ .096	− .017	4	18.81
6317	δ Bootis	K0	3.54	3.55	12 16.598	2.4119	+ .0010	+ .0071	+33 36 45.57	13.395	.267	− .127	4	19.75
6318	BD+27° 2469	K2	8.7	9.3	12 38.656	2.5698	+ .0017	+ .0002	+26 47 59.55	13.371	.285	− .006	4	18.79
6319	β Libræ	B8	2.74	2.84	12 41.952	3.2320	+ .0118	− .0067	− 9 5 18.76	13.367	.357	− .030	78 57	19.37 19.70
6320	BD−16° 4049	F8	9.1	8.64	13 8.917	3.3758	+ .0155	+ .0036	−16 54 11.16	13.338	.373	− .074	4	19.16
6321	Lal 27904	F8	7.08	7.45	15 13 18.259	+2.3106	+ .0010	− .0228	+37 21 46.19	−13.328	+ .258	.000	4	18.54
6322	BD+51° 1990	G5	6.52	6.2	13 23.957	1.8293	+ .0041	+ .0021	+51 14 1.43	13.322	.205	− .077	4	18.91
6323	BD+ 9° 3016 *m.*	F5	8.32	8.8	13 28.504	2.9025	+ .0054	− .003	+ 9 40 22.37	13.317	.323	.00	4	18.75
6324	BD−18° 4025	G5	10.1		13 29.636	3.4087	+ .0163	+ .0022	−18 35 31.17	13.316	.377	− .110	4 5	18.83 20.15
6325	BD+29° 2646	A2	*8.80*	8.8	13 36.923	2.5238	+ .0015	+ .0003	+28 46 37.19	13.307	.281	− .010	4	18.72
6326	1 H Urs Min	G0	5.23	5.44	15 13 42.76	+0.6411	+ .0374	+ .0384	+67 39 1.20	−13.301	+ .074	− .403	13	20.12
6327	BD+46° 2048		9.0	9.1	14 1.472	2.0318	+ .0021	− .005	+46 7 13.69	13.281	.228	+ .07	4	18.98
6328	BD−20° 4204	G0	9.68		14 8.657	3.4422	+ .0171	+ .0020	−20 14 32.59	13.273	.381	+ .020	4	19.41
6329	Fedor 2625	A0	6.50	6.93	14 15.63	0.4297	+ .0470	+ .0018	+69 14 23.74	13.265	.052	+ .005	12	19.14
6330	BD− 7° 3999	K0	7.60	7.43	14 17.761	3.2154	+ .0112	− .002	− 8 6 19.57	13.263	.357	.00	4	19.08
6331	BD+17° 2846	K0	9.1		15 14 21.899	+2.7563	+ .0035	− .001	+17 31 7.76	−13.258	+ .307	+ .02	4	19.02
6332	CD−28° 11280	G5	7.7	8.35	14 29.414	3.6213	+ .0228	+ .0002	−28 40 59.52	13.250	.401	− .042	4	19.39
6333	Pi 15^h 36	G5	5.66	6.01	14 49.234	2.6900	+ .0029	− .0022	+20 51 52.40	13.228	.300	− .033	4	18.76
6334	Wi (1) 15^h 201 *n. pr.*	F8	6.97	6.8	14 51.588	2.8826	+ .0051	− .0068	+10 43 7.51	13.226	.322	− .009	4	18.47
6335	5 Serpentis	G0	5.18	5.32	15 13.568	3.0364	+ .0076	+ .0247	+ 2 4 2.94	13.202	.339	− .527	4	18.13
6336	BD+15° 2842		*8.79*	8.7	15 15 18.076	+2.7946	+ .0040	− .001	+15 27 29.03	−13.197	+ .312	.00	4	18.06
6337	BD+49° 2373	G5	8.8	8.90	15 40.419	1.8893	+ .0035	.000	+49 35 48.76	13.173	.213	.00	4	19.06
6338	BD+36° 2590		*9.62*		15 41.606	2.3208	+ .0012	+ .004	+36 44 20.23	13.171	.261	+ .02	4	18.38
6339	BD+52° 1865	K0	*8.12*	7.83	15 44.530	+1.7874	+ .0047	+ .004	+51 54 28.30	13.168	+ .202	+ .01	4	18.73
6340	BD+81° 504	G0	*9.08*	8.64	15 47.91	−3.2832	+ .3990	− .0043	+80 59 25.37	13.164	− .356	+ .014	4	18.97
6341	BD+79° 463		*9.45*		15 15 51.39	−2.1034	+ .2489	− .0091	+78 58 48.07	−13.160	− .226	+ .058	4	18.67
6342	BD+33° 2573		*9.69*		16 1.811	+2.4140	+ .0013	+ .003	+33 8 53.01	13.149	+ .272	− .04	4	18.31
6343	BD−10° 4085	A0	8.5	7.96	16 9.692	3.2642	+ .0124	− .0017	−10 44 37.95	13.140	.364	.000	4	18.53
6344	Brad 1939	F5	6.11	6.10	16 32.807	3.3484	+ .0145	+ .0018	−15 15 38.63	13.115	.375	+ .012	4	18.49
6345	BD− 1° 3047	K2	6.50	6.37	16 39.288	3.1102	+ .0090	− .0184	− 2 7 16.34	13.108	.349	− .182	4	18.27
6346	φ¹ Lupi	K5	3.59		15 16 43.456	+3.8067	+ .0289	− .0082	−35 58 19.17	−13.103	+ .426	− .095	4	19.30
6347	Wi (1) 15^h 226	K2	7.43	7.03	16 54.078	3.1849	+ .0105	+ .0015	− 6 19 30.83	13.091	.357	+ .013	4	18.56
6348	BD+23° 2802	K7	*9.20*	8.80	16 57.223	2.6461	+ .0025	− .001	+22 51 16.09	13.088	.298	− .02	4	17.96
6349	Brad 1940 *br.*	K0	5.51	5.46	16 57.536	3.0549	+ .0080	− .0036	+ 1 0 19.46	13.087	.343	− .113	4	18.00
6350	BD+60° 1603	K5	8.56	8.41	17 0.436	1.3325	+ .0135	− .003	+59 48 37.44	13.084	.153	+ .01	4	18.25
6351	BD−22° 3938	A0	8.7	8.3	15 17 43.061	+3.4971	+ .0185	+ .0001	−22 41 25.91	−13.037	+ .392	− .019	4	18.60
6352	BD+61° 1495	G0	7.33	7.39	17 43.31	1.1903	+ .0172	− .0036	+61 39 49.60	13.037	.137	+ .004	4	18.32
6353	BD+41° 2596	F2	*8.45*	8.36	17 51.497	2.1731	+ .0016	.000	+41 32 0.41	13.028	.246	+ .02	[illegible]	21.01
6354	BD+18° 3008	K0	*7.83*	7.41	18 5.509	2.7281	+ .0034	− .002	+18 43 31.77	13.013	.308	+ .03	4	18.32
6355	Lac 6355	K0	6.78	6.8	18 10.025	3.5775	+ .0209	+ .0022	−26 24 11.63	13.007	.402	− .001	4	18.71
6356	BD+4° 3006	G	*9.19*		15 18 11.679	+2.9917	+ .0068	− .0008	+ 4 33 21.88	−13.006	+ .338	− .002	4	18.83
6357	o² Libræ	K2	6.74	6.58	18 33.864	3.3427	+ .0142	− .0001	−14 50 57.43	12.981	.377	+ .001	4	19.50
6358	BD+40° 2874		*8.47*	8.38	18 35.954	2.2044	+ .0014	+ .002	+40 27 0.37	12.978	.250	+ .02	6 5	18.95 18.65
6359	BD+67° 882		*9.87*		18 44 15	0.6006	+ .0379	+ .0030	+67 35 59.34	12.969	.072	+ .017	5	18.09
6360	BD−16° 4070	K0	7.60	7.31	19 0.730	3.3706	+ .0148	− .0005	−16 16 44.85	12.951	.381	− .031	4	18.41

6323. $8^{m}5$–$10^{m}3$, 0″7, 352°.

6334. $8^{m}2$, 13″, 171°.

6349. $9^{m}3$, 2″8, 15°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6361	BD+13° 2930	G0	8.01	8.34	15 19 7.390	+ 2.8249	+0.0045	−0.019	+13 39 6.83	−12.943	+0.320	−0.01	4	18.60
6362	BD+48° 2286	Ma	*8.53*	8.38	19 9.412	1.9425	+ .0031	.000	+47 55 13.08	12.941	.222	− .03	4	18.58
6363	Pi 15h 54	K0	5.78	5.74	19 28.707	3.2915	+ .0128	− .0026	−12 5 5.20	12.920	.372	− .048	4	18.59
6364	BD+ 8° 3020	B9	8.9	8.6	19 33.395	2.9304	+ .0059	− .003	+ 7 55 46.60	12.914	.332	+ .03	4	18.14
6365	BD+63° 1189		*9.65*		19 35.88	1.0575	+ .0211	− .006	+63 6 16.93	12.912	.123	− .02	4	18.65
6366	Brad 1945	F0	6.10	6.04	15 19 36.110	+ 3.0859	+ .0085	+ .0045	− 0 44 16.36	−12.911	+ .349	− .035	4	18.40
6367	η Cor Bor *m.*	G0	5.05	5.2	19 53.909	2.4681	+ .0016	+ .0101	+30 34 33.48	12.892	.282	− .198	4	19.32
6368	BD− 3° 3777	G5	8.9	8.8	20 4.618	3.1454	+ .0096	− .0059	− 4 3 44.67	12.880	.357	− .020	4	18.59
6369	BD+35° 2682	G5	*9.21*	9.3	20 17.827	2.3510	+ .0014	+ .006	+35 9 15.78	12.865	.268	− .05	4	18.57
6370	BD+ 3° 3020	F2	*8.28*	8.30	20 17.851	3.0176	+ .0073	− .0016	+ 3 4 50.99	12.865	.343	− .069	4	18.31
6371	BD+55° 1748	G5	*9.15*		15 20 22.261	+ 1.5781	+ .0082	− .009	+55 33 22.20	−12.860	+ .182	+ .01	4	17.81
6372	BD+24° 2856	K0	*8.67*	8.78	20 47.308	+ 2.6086	+ .0024	− .0001	+24 19 34.06	12.832	+ .298	+ .003	4	18.29
6373	γ Urs Min	A2	3.14	3.28	20 50.56	− 0.1100	+ .0731	− .0026	+72 7 7.32	12.828	− .007	+ .012	9	18.51
6374	BD+44° 2460		9.6	9.3	21 3.986	+ 2.0758	+ .0022	− .003	+44 7 44.89	12.813	+ .238	− .04	4	18.55
6375	BD+ 6° 3036	K2	9.5	8.5	21 4.861	2.9606	+ .0063	− .003	+ 6 13 31.76	12.812	.338	+ .02	4	18.01
6376	BD−18° 4061	A2	7.59	7.69	15 21 18.746	+ 3.4116	+ .0157	− .0008	−18 14 6.45	−12.796	+ .388	− .005	4	17.81
6377	CD−24° 12063		9.9		21 27.332	3.5491	+ .0196	− .0016	−24 51 19.73	12.787	.405	− .004	4	18.74
6378	μ^1 Bootis	F0	4.47	4.92	21 28.005	2.2785	+ .0015	− .0126	+37 39 25.42	12.786	.261	+ .078	6	20.60
6379	BD+30° 2656	K0	*9.19*	8.6	21 41.163	2.4699	+ .0018	− .0014	+30 20 22.27	12.771	.283	− .023	4	18.00
6380	τ^1 Serpentis	Ma	5.46	5.26	22 4.668	2.7826	+ .0041	− .0014	+15 42 31.11	12.745	.319	− .026	4	18.34
6381	BD− 7° 4022	G5	9.9		15 22 6.920	+ 3.2188	+ .0111	− .007	− 8 3 37.23	−12.743	+ .368	− .04	4	18.21
6382	BD+13° 2943	G5	8.0	8.38	22 26.302	2.8301	+ .0046	− .003	+13 13 14.43	12.721	.324	+ .02	4	18.11
6383	BD+10° 2853	Ma	7.06	7.32	22 39.384	2.8846	+ .0053	− .002	+10 18 56.95	12.706	.331	− .01	4	17.91
6384	BD+27° 2487	F5	*9.20*	8.9	22 50.279	2.5457	+ .0021	− .0058	+26 59 57.49	12.694	.292	− .038	4	17.99
6385	ι Draconis	K0	3.47	3.44	23 8.787	1.3326	+ .0132	− .0006	+59 14 45.72	12.673	.156	+ .009	4	18.45
6386	BD+44° 2464	K5	7.37	7.32	15 23 14.700	+ 2.0520	+ .0024	+ .002	+44 34 53.21	−12.666	+ .238	.00	4	18.12
6387	BD+67° 887	G5	*8.50*	8.67	23 15.36	0.6519	+ .0346	− .0458	+66 50 6.89	12.665	.079	− .037	4	18.26
6388	32 Libræ	K0	5.92	5.68	23 44.484	3.3788	+ .0147	+ .0011	−16 26 18.12	12.633	.387	− .043	4	18.24
6389	BD+20° 3111	K0	*9.20*	9.2	23 54.763	2.6795	+ .0031	− .004	+20 44 39.01	12.620	.309	− .02	5 4	19.11 18.33
6390	BD+39° 2872 *br.*		*9.20*	9.5	24 12.295	2.2077	+ .0018	− .002	+39 46 18.37	12.601	.256	− .03	4	18.56
6391	Pi 15h 83	K5	6.26	5.98	15 24 12.350	+ 2.5797	+ .0024	+ .0002	+25 22 45.61	−12.601	+ .297	− .039	4	18.40
6392	BD− 1° 3059	F8	8.7	9.1	24 20.010	3.1043	+ .0088	+ .0002	− 1 44 23.01	12.592	.357	+ .030	4	18.56
6393	BD+ 6° 3061	K0	8.7		24 26.693	2.9665	+ .0065	− .002	+ 5 49 54.39	12.585	.341	.00	4	18.65
6394	β Cor Bor	F0	3.72	4.10	24 31.786	2.4869	+ .0020	− .0133	+29 22 50.85	12.579	.287	+ .076	4	18.59
6395	BD−22° 3965	F5	9.4		24 35.493	3.5022	+ .0179	− .0056	−22 25 26.62	12.575	.403	+ .005	4	19.15
6396	BD+43° 2500	G5	7.46	7.25	15 24 53.041	+ 2.0957	+ .0021	− .0054	+43 9 49.93	−12.555	+ .243	− .240	4	19.18
6397	BD−11° 3952		8.6	8.3	25 2.248	3.2839	+ .0124	− .0012	−11 27 17.59	12.544	.379	+ .010	4	18.40
6398	BD+70° 834	F8	*9.32*	9.3	25 6.03	0.2010	+ .0542	− .0025	+70 2 49.00	12.540	.028	− .057	4	19.01
6399	BD+57° 1587	G0	*9.46*	9.3	25 22.578	1.4711	+ .0101	+ .001	+56 54 46.21	12.521	.173	− .06	4	18.31
6400	CD−27° 10399		10.6	ft.	25 23.305	3.6195	+ .0213	+ .0001	−27 39 3.61	12.520	.417	− .063	4	18.72
6401	BD+33° 2593		9.5	8.60	15 25 23.878	+ 2.3790	+ .0017	+ .003	+33 36 38.98	−12.520	+ .277	− .03	4	19.09
6402	BD+11° 2813		*9.61*		25 35.286	2.8571	+ .0050	+ .002	+11 39 52.41	12.507	.331	.00	4	18.92
6403	BD+35° 2691	G5	*9.59*	9.3	25 37.530	2.3424	+ .0017	− .003	+34 57 48.80	12.504	.272	+ .01	4	19.44
6404	BD− 9° 4153	G0	9.4	8.8	25 37.669	+ 3.2528	+ .0117	.000	− 9 46 50.74	12.504	+ .376	+ .05	4	18.58
6405	BD+73° 678	K0	*8.54*	8.3	25 39.27	− 0.3710	+ .0858	+ .0007	+73 7 32.49	12.502	− .037	+ .001	4	18.84
6406	BD+50° 2180		8.9	8.5	15 25 55.174	+ 1.8296	+ .0045	+ .001	+49 56 4.64	−12.484	+ .213	− .04	4	19.32
6407	Lal 28212	A2	6.10	6.53	25 58.588	3.4626	+ .0167	− .0003	−20 27 15.15	12.480	.400	− .027	4	18.49
6408	BD+23° 2819	F5	8.5	8.70	26 7.302	2.6159	+ .0027	− .002	+23 35 5.64	12.470	.304	+ .01	5	19.19
6409	BD+38° 2665		*9.26*	9.5	26 27.820	2.2479	+ .0017	+ .003	+38 12 58.10	12.447	.262	+ .09	4	19.52
6410	BD+19° 2973	K0	8.1	8.06	26 32.958	2.7057	+ .0034	− .002	+19 18 9.99	12.441	.314	.00	4	19.02
6411	BD−13° 4182	F5	8.8	8.8	15 26 49.835	+ 3.3326	+ .0134	− .0036	−13 54 58.28	−12.422	+ .387	− .012	4	18.99
6412	Cape (80) 8439	B8	*6.56*		26 50.043	+ 3.7437	+ .0249	− .0017	−32 36 30.75	12.421	+ .433	− .033	4	19.84
6413	BD+86° 230		*9.52*		26 50.53	−15.580	+3.682	− .011	+86 46 53.38	12.421	−1.778	+ .018	4	19.47
6414	Grmb 2240	A2	6.30	6.58	26 52.784	+ 1.5482	+ .0087	− .0007	+55 28 6.34	12.418	+ .182	+ .022	4	19.34
6415	BD− 3° 3793	K0	8.5	8.55	26 55.051	3.1477	+ .0094	.0000	− 4 5 24.57	12.416	.366	+ .022	4	19.06
6416	BD+28° 2439	A0	*7.95*	8.05	15 26 58.910	+ 2.5164	+ .0021	− .0021	+27 55 52.61	−12.411	+ .293	− .002	4	18.91
6417	Wi (1) 15h 435	F2	6.46	6.57	27 2.307	2.9063	+ .0056	+ .0015	+ 8 51 6.99	12.407	.338	− .007	4	18.58
6418	Wi (2) 15h 538	A2	6.35	6.40	27 8.519	2.4278	+ .0019	− .0036	+31 33 34.00	12.400	.283	− .034	4	19.17
6419	BD+17° 2873	A	*8.94*	8.06	27 9.534	2.7374	+ .0038	− .001	+17 42 45.19	12.399	.319	+ .01	4	19.22
6420	BD+ 3° 3045	G5	*8.94*		27 15.558	3.0176	+ .0073	+ .0005	+ 3 0 1.70	12.392	.351	− .050	4	19.40

6367. 5m58–6m08, 0″.6, 85°.

6390. 11m1, 7″.3, 344°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6421	BD+15° 2876		*9.58*		15 27 17.450	+2.7952	+0.0043	−0.004	+14 47 49.97	−12.390	+0.325	+0.04	5 4	19.99 19.43
6422	BD+72° 682	A5	*9.22*	8.8	27 29.44	−0.2297	+ .0761	+ .0024	+72 20 33.44	12.376	− .021	− .020	4	19.79
6423	CD−23° 12359	Mb	7.12	6.93	27 31.806	+3.5322	+ .0184	+ .0008	−23 36 31.88	12.373	+ .410	− .020	4	19.09
6424	BD+46° 2074	K2	7.74	7.68	27 32.648	1.9586	+ .0033	− .002	+46 39 32.03	12.372	.230	.00	4	19.06
6425	BD+ 1° 3092	G0	*7.29*	7.71	27 38.543	3.0515	+ .0078	− .0017	+ 1 9 25.65	12.366	.356	− .093	4	19.79
6426	CD−26° 10929	F5	8.7		15 27 43.550	+3.5946	+ .0202	− .0029	−26 23 7.72	−12.360	+ .417	− .024	4	19.90
6427	ν^1 Bootis	K5	5.15	5.62	28 3.249	2.1537	+ .0021	+ .0009	+41 6 18.39	12.337	.253	− .015	4	18.70
6428	BD+54° 1750	F8	*8.70*	9.1	28 21.064	1.6086	+ .0075	.000	+54 14 29.91	12.317	.190	+ .13	4	18.53
6429	ν^2 Bootis *m.*	A2	4.98	5.35	28 55.072	2.1489	+ .0021	− .0020	+41 10 12.73	12.278	.252	− .015	4	19.60
6430	BD− 6° 4232	F8	9.4		29 11.760	3.1884	+ .0103	.000	− 6 14 42.49	12.258	.372	+ .01	4	19.11
6431	BD+ 3° 3048	K0	*7.48*	7.65	15 29 17.345	+3.0063	+ .0071	− .0010	+ 3 35 33.56	−12.252	+ .352	− .043	4	18.56
6432	BD+53° 1788	G5	*9.20*	9.1	29 26.188	1.6377	+ .0071	− .008	+53 35 39.19	12.242	.194	+ .01	5 6	18.80 18.08
6433	θ Cor Bor	B5	4.17	4.37	29 42.123	2.4204	+ .0019	− .0020	+31 37 42.50	12.223	.285	− .026	4	19.89
6434	37 Libræ	K0	4.83	4.68	29 48.133	3.2555	+ .0115	+ .0202	− 9 47 28.01	12.216	.381	− .248	4	18.58
6435	BD−15° 4141	K0	9.4	8.5	29 49.410	3.3788	+ .0143	− .0017	−16 6 44.03	12.215	.395	+ .009	4	19.10
6436	BD+38° 2674		*9.69*		15 29 50.883	+2.2469	+ .0019	+ .005	+37 55 49.95	−12.213	+ .265	+ .01	4	19.64
6437	BD−17° 4368	A0	8.9	8.41	29 53.974	3.4055	+ .0149	.0000	−17 25 49.40	12.210	.399	− .030	4	20.59
6438	BD+64° 1075		*8.90*	8.76	30 5.28	0.8577	+ .0258	+ .0063	+64 24 57.55	12.197	.104	− .019	4	19.33
6439	CD−28° 11422		9.4		30 7.784	3.6534	+ .0216	− .0012	−28 42 2.46	12.194	.427	+ .001	4	20.60
6440	BD−11° 3969	K2	8.8	8.97	30 13.360	3.2902	+ .0123	+ .0007	−11 34 58.68	12.187	.386	− .014	4	19.50
6441	BD− 7° 4054	A3	8.1	8.32	15 30 25.504	+3.2191	+ .0107	− .002	− 7 50 53.29	−12.173	+ .377	− .02	4	19.51
6442	BD−19° 4148	G0	10.1	ft.	30 27.136	3.4542	+ .0161	− .0028	−19 45 50.16	12.171	.405	+ .002	5	21.15
6443	BD− 9° 4173	A0	8.9	8.75	30 39.291	3.2512	+ .0114	.000	− 9 32 5.80	12.157	.382	+ .02	4	18.92
6444	BD+52° 1880	G5	*9.52*		30 40.902	1.6815	+ .0064	− .021	+52 37 36.25	12.155	.200	+ .16	4	20.02
6445	BD+46° 2081		*9.45*	8.87	30 49.268	1.9637	+ .0034	− .003	+46 12 37.47	12.146	.233	+ .02	4	20.08
6446	γ Libræ	K0	4.02	3.94	15 31 2.863	+3.3483	+ .0135	+ .0045	−14 31 25.34	−12.130	+ .394	− .001	65 51	19.10 19.38
6447	α Cor Bor	A0	2.31	2.65	31 17.968	2.5306	+ .0024	+ .0090	+26 58 59.63	12.112	.299	− .102	62 49	19.19 19.57
6448	BD+ 5° 3041	K0	*9.54*		31 26.554	2.9747	+ .0066	− .0008	+ 5 15 30.69	12.102	.351	− .057	4	18.90
6449	BD+18° 3044	K0	6.06	6.04	31 55.287	2.7276	+ .0037	− .005	+17 55 16.47	12.068	.323	− .02	4	19.01
6450	Wi (1) 15^h 535	G5	6.11	6.31	32 4.934	2.8549	+ .0050	− .0027	+11 31 51.17	12.057	.337	− .011	4	19.34
6451	BD+59° 1661	K7	*9.60*		15 32 5.561	+1.2678	+ .0142	− .006	+59 23 47.25	−12.057	+ .153	+ .03	4	19.58
6452	3 H Scorpii *br.*	K2	3.78	3.98	32 9.829	3.6374	+ .0208	− .0007	−27 52 15.69	12.052	.429	− .005	4	19.42
6453	BD+39° 2889	Ma	5.44	5.7	32 18.672	2.1991	+ .0021	+ .0024	+39 16 30.36	12.042	.261	− .006	4	19.50
6454	BD+46° 2084		9.6		32 24.279	1.9466	+ .0035	− .006	+46 29 56.61	12.035	.232	− .01	4	19.52
6455	CD−23° 12420	K2	9.7	8.3	32 33.662	3.5520	+ .0184	− .0024	−24 8 44.48	12.024	.419	− .038	4	19.12
6456	BD+65° 1061	A3	*8.52*	8.99	15 32 34.09	+0.7294	+ .0297	− .0018	+65 28 23.63	−12.024	+ .090	+ .009	4	19.27
6457	BD−12° 4295	G0	8.1	8.32	32 49.998	3.3219	+ .0128	− .0080	−13 6 36.99	12.005	.392	− .008	4	18.84
6458	BD+61° 1518		*9.20*		32 52.25	1.1269	+ .0176	.000	+61 11 13.48	12.003	.137	.00	4	19.02
6459	BD+ 0° 3381	G0	*8.61*		33 11.843	3.0708	+ .0081	+ .0038	+ 0 5 59.74	11.979	.364	− .066	4	19.08
6460	o Scorpii	B3	3.80	3.3	33 44.302	3.6804	+ .0219	− .0018	−29 30 56.21	11.942	.433	− .033	4	18.40
6461	BD+27° 2520	K0	*9.09*	9.2	15 33 44.854	+2.5252	+ .0024	+ .0019	+27 1 22.30	−11.941	+ .300	− .001	4	18.57
6462	θ Urs Min	K5	5.33	5.21	33 45.51	−1.8160	+ .1869	− .0136	+77 36 58.57	11.940	− .207	+ .006	8	18.39
6463	BD+42° 2622	G0	*8.89*	8.9	33 47.139	+2.0928	+ .0026	− .005	+42 23 31.38	11.938	+ .250	+ .06	4	18.56
6464	BD+12° 2865	K0	*8.24*	8.72	33 57.949	2.8470	+ .0049	− .003	+11 52 0.47	11.926	.338	− .02	4	18.84
6465	BD− 3° 3809	K0	9.4		34 5.399	3.1441	+ .0092	− .0051	− 3 48 9.34	11.917	.374	.000	4	18.88
6466	BD+ 7° 2996	F0	8.7	8.60	15 34 9.358	+2.9278	+ .0060	− .002	+ 7 41 3.26	−11.912	+ .348	− .02	4	18.85
6467	Brad 1975	G5	5.53	5.55	34 18.012	3.4438	+ .0155	+ .0066	−19 2 21.06	11.902	.409	− .088	4	18.30
6468	BD−21° 4159	K5	8.3	7.22	34 19.865	3.5118	+ .0173	.0000	−22 12 46.70	11.900	.418	.000	4	18.42
6469	BD− 1° 3074	G5	7.9	8.44	34 33.279	+3.1014	+ .0085	+ .0006	− 1 31 30.66	11.884	+ .369	− .043	4	18.76
6470	Carr 2352	K0	6.97	6.70	34 41.21	−3.7543	+ .3973	+ .0053	+81 2 18.26	11.875	− .436	+ .025	8	18.62
6471	BD+25° 2944	G5	*8.89*	8.71	15 34 44.336	+2.5748	+ .0028	+ .0019	+24 49 4.66	−11.871	+ .308	− .025	4	18.48
6472	Wi (2) 15^h 752	K0	7.62	7.48	34 55.485	2.6168	+ .0030	− .0047	+22 56 7.80	11.858	.312	+ .003	4	18.57
6473	ϕ Bootis	G5	5.41	5.45	34 57.135	2.1487	+ .0024	+ .0055	+40 36 47.73	11.856	.258	+ .047	5 6	18.53 17.85
6474	BD+15° 2894	F5	*8.16*	7.84	35 2.926	2.7702	+ .0043	+ .002	+15 40 34.46	11.849	.330	− .05	4	18.51
6475	Pi 15^h 153	F0	5.78	5.70	35 42.384	1.9119	+ .0039	+ .0082	+47 3 39.04	11.803	.231	− .138	4	18.56
6476	BD+ 9° 3080	G5	8.5	8.72	15 35 42.848	+2.8970	+ .0055	− .001	+ 9 15 24.67	−11.802	+ .346	− .02	4	18.32
6477	Pi 15^h 148	K0	6.19	6.35	35 43.327	2.3182	+ .0021	+ .0009	+34 56 6.96	11.802	.278	− .027	5	17.64
6478	BD+16° 2814	A2	6.92	6.99	35 59.958	2.7510	+ .0041	− .003	+16 34 19.45	11.782	.329	+ .05	4	18.00
6479	ζ^2 Cor Bor *s. f.*	B8	5.07	5.37	36 21.796	2.2602	+ .0022	− .0009	+36 53 41.35	11.756	.271	− .009	4	17.86
6480	BD+21° 2800	K2	*8.98*	8.68	36 25.862	2.6479	+ .0032	− .0013	+21 25 37.57	11.752	.318	− .008	4 3	18.70 19.87

6429. $5^{m}7$-$5^{m}7$, $<0''1$.

6452. $11^{m}8$, $3''2$, 161°.

6479. $6^{m}00$, $6''3$, 304°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6481	BD− 4° 3046	F0	8.4	8.37	15 36 35.631	+2.9888	+0.0068	+0.0013	+ 4 25 42.78	−11.741	+0.358	−0.039	4	18.15
6482	BD−52° 1890	K0	*8.24*	8.30	36 37.184	1.6948	+ .0063	− .001	+51 49 42.06	11.738	.205	+ .02	4	18.59
6483	BD−43° 2519	K0	*8.79*	8.63	36 39.592	+2.0666	+ .0028	− .005	+42 53 0.93	11.735	+ .249	.00	4	18.02
6484	BD+79° 470	G0	*8.37*	8.4	36 58.06	−2.7561	+ .2726	− .0136	+79 27 39.07	11.714	− .321	+ .019	4	18.98
6485	CD−25° 11038	G5	8.9	8.6	37 0.524	+3.5992	+ .0191	− .0022	−25 53 34.42	11.711	+ .432	− .062	4	18.56
6486	κ Libræ	K5	4.96	5.08	15 37 20.038	+3.4555	+ .0155	− .0032	−19 25 13.30	−11.688	+ .414	− .119	4	18.16
6487	Wi (1) 15h 652	K0	7.42	7.15	37 29.785	3.1905	+ .0101	− .0014	− 6 11 17.91	11.675	.383	− .007	4	18.58
6488	BD+55° 1768	F5	*8.62*	8.50	37 38.461	1.5132	+ .0090	− .002	+55 7 45.13	11.666	.184	+ .01	5	18.33
6489	BD+29° 2699	K0	8.6	8.97	37 44.380	2.4580	+ .0024	+ .0015	+29 29 8.31	11.659	.297	− .071	4	18.54
6490	BD+19° 3002	A2	8.7	8.8	37 44.600	2.6898	+ .0036	− .002	+19 24 21.57	11.658	.324	+ .01	4	18.55
6491	BD+14° 2917		9.1		15 37 49.255	+2.7927	+ .0045	− .006	+14 26 24.48	−11.653	+ .336	− .06	4	18.59
6492	BD+69° 807	A2	*9.50*		37 50.67	0.2194	+ .0483	+ .0021	+69 8 15.45	11.652	.031	− .006	4	19.30
6493	ι Serpentis *m.*	A2	4.49	4.68	37 58.962	2.6783	+ .0035	− .0051	+19 55 37.96	11.641	.322	− .055	4 5	19.78 19.11
6494	BD+38° 2688	F8	8.14	8.4	38 4.562	2.2060	+ .0024	− .005	+38 32 12.85	11.635	.267	+ .03	4	18.40
6495	BD− 0° 3001	K0	8.3	8.36	38 13.897	3.0946	+ .0084	− .0004	− 1 9 14.73	11.624	.372	− .010	4	18.85
6496	BD+32° 2615		*9.70*		15 38 25.136	+2.3891	+ .0023	+ .001	+32 6 38.28	−11.610	+ .289	− .08	4	18.28
6497	BD− 7° 4086		10.6		38 43.255	3.2108	+ .0103	− .001	− 7 13 1.01	11.589	.385	− .02	4	19.57
6498	BD+50° 2210	F8	*8.50*	9.13	38 53.741	1.7512	+ .0056	+ .002	+50 27 32.83	11.576	.213	− .01	4	18.80
6499	Brad 1987	K0	6.44	6.51	38 55.542	3.3607	+ .0133	− .0011	−14 47 14.71	11.575	.405	− .110	4	18.39
6500	BD−17° 4409	G5	10.3		39 13.721	3.4181	+ .0145	− .0046	−17 32 59.78	11.553	.412	− .048	4	19.54
6501	BD+39° 2903		*9.64*		15 39 20.270	+2.1705	+ .0026	− .005	+39 33 10.66	−11.545	+ .264	+ .05	4	18.90
6502	γ Cor Bor *m.*	A0	3.93	4.2	39 22.924	2.5268	+ .0026	− .0075	+26 32 53.90	11.542	.305	+ .030	4	19.38
6503	BD− 8° 4060	F0	7.46	7.41	39 24.904	3.2470	+ .0109	− .001	− 9 3 43.04	11.539	.392	+ .03	4	18.61
6504	BD+49° 2417	G5	8.52	8.65	39 25.162	1.7843	+ .0053	− .008	+49 41 52.03	11.539	.218	+ .11	4	19.23
6505	BD+60° 1629 *m.*	K0	*8.35*	8.39	39 45.51	1.1597	+ .0161	− .034	+60 14 20.86	11.515	.143	+ .15	4	19.41
6506	BD−11° 3998	G0	9.4	8.9	15 39 51.566	+3.2995	+ .0120	+ .0022	−11 42 40.91	−11.507	+ .398	.000	4	19.45
6507	ψ Serpentis *br.*	G5	5.80	5.88	40 0.270	3.0197	+ .0072	− .0057	+ 2 46 14.74	11.497	.365	− .150	4	19.18
6508	BD+44° 2503		*9.14*	8.88	40 7.505	2.0193	+ .0033	− .004	+43 53 24.03	11.488	.246	− .01	5	19.21
6509	BD+13° 2993	K5	8.5	8.34	40 9.208	2.8185	+ .0048	− .003	+13 4 13.17	11.486	.342	+ .02	4	19.12
6510	BD−21° 4180	B3	8.5		40 15.639	3.5057	+ .0165	− .0037	−21 33 49.17	11.479	.425	+ .004	4	19.61
6511	α Serpentis	K0	2.75	2.97	15 40 19.546	+2.9445	+ .0062	+ .0090	+ 6 40 34.94	−11.474	+ .357	+ .038	77 34	19.74 19.63
6512	CD−29° 11927		9.7		40 21.628	3.6974	+ .0214	− .0036	−29 41 9.60	11.472	.447	− .030	4	19.90
6513	BD+66° 917	K2	*8.60*	8.37	40 30.73	+0.5344	+ .0348	− .0024	+66 38 21.79	11.461	+ .069	+ .016	4	20.02
6514	BD+76° 569		*9.02*	9.2	40 35.44	−1.5689	+ .1559	+ .0023	+76 42 24.94	11.455	− .183	+ .019	4	19.76
6515	Grmb 2270	A0	5.48	5.58	40 40.047	+1.6374	+ .0071	− .0064	+52 36 46.56	11.450	+ .201	+ .022	4	19.85
6516	Brad 1993	A0	5.89	6.46	15 41 4.014	+2.7261	+ .0039	− .0018	+17 30 53.99	−11.421	+ .331	− .014	4	18.76
6517	Lac 6516 *m*	A5	6.45	6.20	41 20.325	3.6525	+ .0201	− .0044	−27 48 41.45	11.401	.442	− .026	4	18.66
6518	Lac 6514 *m.*	B8	5.61		41 37.348	3.8269	+ .0249	− .0012	−34 25 58.61	11.381	.464	− .022	4 5	19.86 19.17
6519	BD−19° 4213	K0	9.2		41 57.150	3.4598	+ .0153	− .0012	−19 22 9.99	11.357	.419	− .007	4	18.91
6520	BD+ 0° 3399	G0	*9.31*		42 13.886	3.0636	+ .0078	+ .0018	+ 0 28 34.13	11.337	.373	− .025	4	18.59
6521	BD+57° 1604	F0	*9.40*		15 42 24.200	+1.3783	+ .0113	+ .001	+56 56 45.91	−11.325	+ .171	− .02	4	18.64
6522	β Serpentis	A2	3.74	3.79	42 29.632	2.7633	+ .0043	+ .0049	+15 40 16.89	11.318	.337	− .057	70 39	19.45 19.65
6523	λ Serpentis	G0	4.42	4.59	42 33.588	+2.9255	+ .0059	− .0158	+ 7 36 10.27	11.313	+ .356	− .064	4	19.07
6524	BD+82° 464	K0	*8.42*	8.40	42 44.07	−4.8706	+ .5165	− .0252	+82 5 21.70	11.301	− .581	+ .061	4	19.32
6525	BD+21° 2818	K7	*9.58*		42 53.720	+2.6350	+ .0033	.000	+21 37 18.47	11.289	+ .322	− .02	4	19.10
6526	BD+43° 2525		*9.60*		15 43 0.889	+2.0351	+ .0033	− .003	+43 12 29.52	−11.280	+ .250	+ .03	4	19.03
6527	BD+58° 1591	F0	7.32	7.83	43 1.836	1.2571	+ .0138	− .015	+58 40 54.56	11.279	.156	+ .05	4	18.86
6528	BD+34° 2683		*9.62*		43 3.850	2.3161	+ .0024	− .002	+34 24 17.82	11.277	.284	− .02	5	19.41
6529	CD−25° 11098 *br*	A0	6.94	6.60	43 7.091	3.6054	+ .0186	+ .0026	−25 44 24.11	11.273	.439	− .013	4	19.39
6530	BD− 4° 3975	G5	8.1	8.7	43 8.902	3.1669	+ .0094	− .0025	− 4 52 18.88	11.271	.387	+ .007	4	19.09
6531	BD+ 3° 3084	A2	*9.14*	8.3	15 43 12.981	+3.0061	+ .0070	+ .0004	+ 3 27 2.49	−11.266	+ .367	− .037	4	18.79
6532	BD+48° 2326		*9.45*		43 20.668	1.8385	+ .0048	− .005	+48 8 33.79	11.257	.226	+ .02	4	19.04
6533	Lal 28744	A0	6.66	7.03	43 41.803	3.5560	+ .0173	− .0048	−23 35 16.68	11.231	.434	− .033	4	19.00
6534	BD+27° 2538	K2	8.09	8.35	43 51.796	2.4969	+ .0028	+ .0004	+27 28 18.91	11.219	.307	− .016	4	18.92
6535	BD−13° 4252	K0	7.02	6.92	43 57.865	3.3336	+ .0124	− .0007	−13 15 13.30	11.212	.408	− .006	4	19.19
6536	BD− 6° 4281	A2	10.1		15 44 7.404	+3.2060	+ .0101	− .002	− 6 51 3.39	−11.200	+ .393	+ .01	4	18.90
6537	BD+37° 2675	K0	*7.99*	8.32	44 26.803	2.2237	+ .0025	− .001	+37 25 38.09	11.177	.274	− .06	4	19.11
6538	BD−14° 4294		10.1		44 26.916	3.3796	+ .0132	− .0014	−15 10 23.47	11.177	.413	+ .013	4	19.50
6539	Brad 1999	A3	5.61	5.64	44 45.279	3.1421	+ .0080	− .0025	+ 3 34 27.07	11.154	.386	+ .004	4	18.73
6540	CD−27° 10585	G0	8.3		44 58.378	3.6545	+ .0196	− .0018	−27 38 11.04	11.139	.447	− .130	4	19.19

6493. [illegible], 0″2.
6502. 4m0–7m0, 0″6, 115°.

6505. [illegible], 0″5, 61°.
6507. 13m, 3″6, 93°.

6517. 7m2–7m4, 0″5, 160°.
6518. 6m2–6m5, 0″1, 36°.

6529. 9m9, 1″0, 10°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6541	κ Serpentis	K5	4.28	4.56	15 45 8.210	+2.7032	+0.0039	−0.0032	+18 23 16.25	−11.127	+0.333	−0.101	4	19.60
6542	BD+12° 2903		*9.59*		45 12.820	2.8284	+ .0049	+ .001	+12 23 44.61	11.121	.349	+ .01	4	19.05
6543	BD+30° 2710	G5	*9.08*	8.92	45 14.073	2.4273	+ .0025	− .0099	+30 8 5.05	11.119	.300	− .027	4	19.38
6544	*R* Cor Bor	G0	Var.	6.33	45 16.563	2.4714	+ .0026	+ .0003	+28 24 4.85	11.116	.305	− .018	4	19.38
6545	BD−17° 4431	F2	6.69	7.1	45 17.527	3.4267	+ .0142	− .0003	−17 39 30.75	11.115	.421	− .004	4	18.91
6546	BD+10° 2909	K2	*8.92*	8.3	15 45 25.344	+2.8685	+ .0053	− .001	+10 23 57.87	−11.106	+ .353	− .04	4	19.05
6547	BD+23° 2862	F8	7.72	7.66	45 26.071	2.5893	+ .0032	− .004	+23 29 11.10	11.105	.319	− .03	4	19.61
6548	12 H Draconis	A2	5.13	5.53	45 26.55	0.9036	+ .0221	+ .0052	+62 50 47.52	11.104	.115	− .060	4	18.73
6549	μ Serpentis	A0	3.63	3.70	45 26.590	3.1346	+ .0088	− .0059	− 3 11 10.59	11.104	.385	− .028	61 32	19.17 19.03
6550	χ Lupi	B9	4.11		45 52.222	3.8068	+ .0236	− .0007	−33 23 3.86	11.073	.468	− .028	4	18.20
6551	BD+ 6° 3103	A0	7.9	7.20	15 46 15.659	+2.9516	+ .0062	− .002	+ 6 11 51.23	−11.045	+ .364	.00	4	18.90
6552	BD+31° 2786	G5	*9.42*	9.4	46 34.043	2.3878	+ .0026	− .0005	+31 32 0.02	11.022	.295	+ .017	4	19.05
6553	BD−10° 4178	K5	8.1	8.43	46 34.884	3.2846	+ .0112	− .0016	−10 44 58.06	11.021	.404	.000	4	18.92
6554	ε Serpentis	A2	3.75	3.91	46 49.572	2.9805	+ .0065	+ .0083	+ 4 43 3.41	11.003	.368	+ .057	71 61	19.43 19.37
6555	BD+17° 2919		*9.31*		46 49.711	+2.7149	+ .0039	.000	+17 45 50.43	11.003	+ .335	.00	4	19.38
6556	ζ Urs Min	A2	4.34	4.82	15 46 52.92	−2.2019	+ .1984	+ .0080	+78 2 28.45	−10.999	− .263	− .003	10	19.19
6557	BD+41° 2640		*9.80*		47 14.980	+2.0836	+ .0030	− .003	+41 29 25.31	10.972	+ .259	− .01	5	19.02
6558	BD+19° 3023	F2	*8.65*	8.7	47 18.944	2.6783	+ .0037	− .002	+19 25 16.96	10.968	.330	− .01	4	18.80
6559	CD−29° 12033	K2	9.9		47 25.144	3.7004	+ .0204	− .0040	−29 17 30.39	10.960	.456	− .022	4	19.14
6560	BD−21° 4207	A3	8.08	8.06	47 27.680	+3.5122	+ .0158	− .0005	−21 26 34.38	10.957	+ .433	− .027	4	19.87
6561	BD+73° 694		*8.97*	8.7	15 47 33.99	−0.6181	+ .0848	+ .0009	+73 7 41.64	−10.949	− .071	+ .016	4	19.02
6562	BD− 9° 4249	K0	8.8	8.61	47 35.966	+3.2546	+ .0107	− .002	− 9 13 52.30	10.947	+ .402	+ .11	4	18.86
6563	BD+64° 1091	K0	*9.27*		47 40.71	0.7419	+ .0264	− .0015	+64 20 26.00	10.941	.095	+ .008	4	19.08
6564	BD+25° 2979	F5	9.2		47 48.280	2.5401	+ .0030	+ .0003	+25 25 37.44	10.932	.315	+ .026	4	18.87
6565	BD+14° 2951	K2	7.67	7.76	47 49.789	2.7904	+ .0046	− .006	+14 8 41.10	10.930	.346	+ .04	4	18.80
6566	BD+63° 1228	F0	*8.28*	8.39	15 47 59.06	+0.8363	+ .0235	− .002	+63 23 2.53	−10.919	+ .107	.00	4	19.47
6567	BD+45° 2341		9.4		48 3.634	1.9420	+ .0040	− .003	+45 14 58.88	10.913	.242	+ .07	4	18.87
6568	BD− 0° 3026	A0	7.9	7.96	48 27.810	3.0882	+ .0080	− .0016	− 0 47 32.44	10.883	.382	− .037	4	18.42
6569	λ Libræ	B3	5.06	5.45	48 41.202	3.4798	+ .0151	− .0010	−19 55 44.26	10.867	.431	− .034	4	18.83
6570	BD−18° 4189	F8	9.2	9.2	48 43.409	3.4629	+ .0147	+ .001	−19 9 36.45	10.864	.429	.00	4	19.29
6571	BD− 2° 4064	F5	7.36	7.46	15 49 12.576	+3.1275	+ .0085	− .0057	− 2 47 29.06	−10.829	+ .388	− .033	4	18.39
6572	BD+50° 2225	G5	*9.60*		49 13.486	1.7312	+ .0059	− .002	+50 1 31.90	10.827	.217	− .02	4	19.08
6573	BD+ 8° 3101	K0	*8.99*	9.1	49 15.542	2.9027	+ .0057	− .005	+ 8 35 48.15	10.825	.357	− .01	4	18.62
6574	BD+37° 2683		9.2		49 46.399	2.2254	+ .0027	+ .004	+36 57 10.46	10.787	.278	+ .02	4	19.10
6575	BD+ 7° 3047		10.5	ft.	49 50.620	2.9200	+ .0059	+ .005	+ 7 43 17.89	10.782	.364	− .02	4 5	20.92 20.18
6576	BD+ 3° 3095		*9.36*	8.8	15 49 52.673	+3.0101	+ .0069	− .0021	+ 3 10 55.18	−10.779	+ .375	− .049	4	19.28
6577	χ Herculis	G0	4.61	5.37	49 54.475	2.0339	+ .0033	+ .0399	+42 40 29.01	10.777	.254	+ .620	4	19.59
6578	BD+31° 2795	K5	*7.90*	7.98	50 4.586	+2.3826	+ .0027	− .0056	+31 28 30.68	10.764	+ .297	− .076	4	18.89
6579	BD+71° 752 *m.*		*9.25*	8.8	50 19.74	−0.1885	+ .0610	− .0065	+70 55 7.55	10.746	− .019	− .014	4 5	18.85 19.34
6580	BD+ 5° 3108	K0	7.08	7.24	50 28.012	+2.9635	+ .0063	+ .003	+ 5 31 41.93	10.736	+ .369	+ .05	4	18.37
6581	BD−22° 4052	A2	8.6	7.8	15 50 32.720	+3.5549	+ .0165	− .002	−23 7 57.17	−10.730	+ .442	+ .01	4	18.79
6582	BD+46° 2124	G5	7.32	7.42	50 36.973	1.8923	+ .0044	.0000	+46 16 32.61	10.725	.238	+ .020	4	18.93
6583	BD+69° 818 *m.*		*9.18*		50 39.71	0.1413	+ .0466	− .0011	+68 56 2.43	10.721	.022	+ .008	4	19.05
6584	BD+53° 1821	F2	*10.35*		50 47.875	1.5433	+ .0082	+ .003	+53 33 9.45	10.711	.195	− .01	4	19.76
6585	BD+11° 2883	A2	7.7	7.76	51 1.828	2.8376	+ .0051	− .001	+11 44 54.97	10.694	.355	+ .06	4	18.75
6586	Pi 15h 212	K5	5.76	5.38	15 51 2.979	+2.6491	+ .0036	− .0052	+20 32 40.98	−10.693	+ .332	+ .039	4	18.58
6587	BD+18° 3087		*9.36*	8.5	51 9.275	2.6994	+ .0039	.000	+18 16 24.52	10.685	.337	+ .01	4	18.60
6588	BD− 4° 4000	A0	9.7		51 9.508	3.1566	+ .0089	− .0014	− 4 14 32.94	10.684	.394	.000	4	18.61
6589	BD+60° 1639 *br.*	G5	*8.82*		51 32.46	+1.0844	+ .0168	− .003	+60 20 55.07	10.656	+ .139	+ .06	4	18.62
6590	Grmb 2315	A2	7.32	7.06	51 37.41	−6.4084	+ .6990	+ .0090	+83 11 26.51	10.650	− .787	+ .004	8	18.41
6591	BD+26° 2754	K0	*8.27*	8.26	15 51 59.895	+2.5140	+ .0030	− .0015	+26 14 31.37	−10.622	+ .315	+ .004	4	18.33
6592	BD−13° 4293	K0	8.0	8.37	52 17.874	3.3417	+ .0120	− .0038	−13 20 37.24	10.600	.418	− .012	4	18.38
6593	CD−27° 10666	K0	8.5		52 18.603	3.6647	+ .0189	+ .0008	−27 33 35.99	10.599	.458	− .082	4	18.58
6594	BD+28° 2494	F5	*8.23*	8.25	52 24.457	2.4527	+ .0029	+ .0086	+28 39 17.39	10.592	.308	− .144	4	18.31
6595	BD−14° 4316	G5	9.56		52 26.939	3.3789	+ .0127	+ .0006	−15 6 1.88	10.589	.423	− .017	4	18.73
6596	γ Serpentis	F5	3.86	3.87	15 52 45.354	+2.7488	+ .0043	+ .0212	+15 55 19.39	−10.566	+ .344	−1.296	109 77	19.33 19.53
6597	BD+39° 2933	F2	7.92	7.82	53 16.535	2.1299	+ .0031	+ .002	+39 39 37.50	10.527	.268	+ .06	5	18.76
6598	BD+54° 1780	K0	*8.35*	7.98	53 23.585	1.4919	+ .0090	+ .001	+54 15 47.53	10.519	.189	+ .05	4	18.32
6599	BD+61° 1549	G5	*9.30*		53 26.07	0.9543	+ .0196	− .002	+61 45 42.27	10.516	.123	− .07	4	18.94
6600	φ Serpentis	K0	5.66	5.46	53 33.031	2.7754	+ .0045	− .0077	+14 38 34.57	10.507	.349	+ .074	4	18.57

6544. $5^{\mathrm{m}}8$ to $13^{\mathrm{m}}8$.

6579. $9^{\mathrm{m}}4$–$12^{\mathrm{m}}4$, 0″.9, 340°.

6583. $9^{\mathrm{m}}9$–$10^{\mathrm{m}}0$, 1″.3, 230°.

6589. $10^{\mathrm{m}}0$, 1″.2, 290°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6601	π Scorpii	B2	3.00	3.68	15 54 0.476	+3.6256	+0.0177	−0.0011	−25 53 5.23	−10.473	+0.456	−0.036	4	18.28
6602	ε Cor Bor br.	K0	4.22	4.4	54 16.481	2.4890	+ .0030	− .0064	+27 6 31.39	10.453	.314	− .068	4	18.70
6603	BD+49° 2435	K2	*9.13*	9.4	54 28.335	1.7491	+ .0057	+ .004	+49 14 30.53	10.438	.223	.00	4	18.23
6604	CD−24° 12439	A0	9.4		54 41.372	3.6023	+ .0170	− .0005	−24 53 21.48	10.422	.453	− .010	4	18.85
6605	BD− 8° 4123	G0	8.7	8.25	54 56.002	3.2439	+ .0102	.000	− 8 31 29.37	10.404	.409	+ .02	4	18.36
6606	BD+26° 2761	K0	9.76	9.5	15 55 7.415	+2.5111	+ .0031	.000	+26 10 12.33	−10.389	+ .317	.00	5	17.97
6607	BD−22° 4066 m.	F0	8.7		55 15.704	3.5574	+ .0161	− .0005	−22 58 25.01	10.379	.448	+ .020	4	17.77
6608	BD+15° 2937		*9.46*		55 20.730	2.7579	+ .0044	+ .001	+15 23 35.66	10.373	.348	+ .09	4	18.55
6609	BD+34° 2715		*9.51*		55 23.946	+2.3060	+ .0028	− .002	+33 50 18.10	10.369	+ .293	− .01	4	19.25
6610	BD+75° 578		*9.07*	8.55	55 28.05	−1.2095	+ .1127	− .0031	+75 2 40.02	10.364	− .147	− .017	4	18.33
6611	Rad (90) 4132	K0	7.42	7.27	15 55 31.219	+3.1909	+ .0093	− .0018	− 5 54 0.87	−10.360	+ .403	− .027	4	18.54
6612	BD+36° 2672	Mb	Var.	7.32	55 32.267	2.2338	+ .0028	− .0037	+36 14 59.42	10.359	.283	− .008	5	18.34
6613	BD+25° 3005	K0	*8.67*	8.58	55 34.564	2.5429	+ .0032	− .0002	+24 50 55.03	10.356	.324	.000	4	18.24
6614	δ Scorpii	B0	2.54	2.99	55 35.973	3.5442	+ .0157	− .0009	−22 23 42.26	10.354	.446	− .039	17	22.10
6615	BD−21° 4247	Ma	9.7		55 39.251	3.5181	+ .0151	+ .0032	−21 15 54.81	10.349	.444	− .007	4	19.23
6616	49 Libræ	F8	5.53	5.89	15 55 50.106	+3.4075	+ .0129	− .0440	−16 17 55.00	−10.336	+ .430	− .401	4	18.64
6617	Grmb 2296	A5	4.96	5.08	55 53.468	1.4388	+ .0097	− .0186	+54 58 30.91	10.332	.184	+ .108	5	17.77
6618	BD+ 1° 3154	K5	7.54	7.13	55 57.483	3.0557	+ .0073	− .0008	+ 0 50 58.60	10.327	.386	− .002	4	18.74
6619	BD+67° 921		*9.32*		56 16.45	0.2765	+ .0395	− .0016	+67 42 33.73	10.303	.039	+ .022	4	18.40
6620	BD−18° 4213	G0	9.1	8.3	56 21.935	3.4616	+ .0140	− .0002	−18 44 16.12	10.297	.437	− .062	4 5	18.86 19.35
6621	BD+10° 2938		*9.58*	9.4	15 56 22.104	+2.8697	+ .0053	− .003	+10 2 18.31	−10.296	+ .363	.00	4	18.76
6622	BD+20° 3180	M1	*8.70*	8.85	56 27.250	2.6063	+ .0037	− .001	+20 23 23.32	10.290	.335	+ .02	4	18.57
6623	BD−12° 4393	F5	8.9		56 34.022	3.3302	+ .0115	+ .0015	−12 38 56.81	10.282	.420	+ .014	4	18.82
6624	Brad 2031	K0	5.90	6.02	56 52.744	2.9793	+ .0065	− .0031	+ 4 39 1.23	10.258	.378	+ .066	4	18.37
6625	BD+22° 2909	G0	*9.46*		57 1.351	2.6065	+ .0035	.000	+22 5 40.83	10.247	.332	− .02	4	18.30
6626	BD− 1° 3126		9.8		15 57 5.334	+3.0996	+ .0078	+ .0032	− 1 20 18.14	−10.242	+ .392	− .028	4	19.42
6627	BD+12° 2933	F2	*8.15*	8.47	57 6.304	2.8138	+ .0048	− .002	+12 42 2.65	10.241	.357	+ .02	4	18.52
6628	BD+ 2° 3030	K0	8.6	8.32	57 26.274	3.0268	+ .0070	− .0010	+ 2 17 16.72	10.216	.384	− .005	5	18.11
6629	Lal 29200	K0	6.68	6.48	57 33.150	2.3598	+ .0028	+ .0059	+31 47 36.99	10.207	.301	− .045	4	19.06
6630	BD−10° 4227	K5	8.8	8.77	57 36.214	3.2977	+ .0108	− .0014	−11 4 10.15	10.204	.416	+ .004	4	18.92
6631	τ Herculis	G5	5.28	5.36	15 57 38.540	+2.6981	+ .0040	− .0037	+18 2 18.91	−10.201	+ .343	+ .144	4	19.49
6632	Cape (80) 8712	K0	6.16	6.19	57 41.872	+3.7082	+ .0192	+ .0043	−28 54 46.91	10.196	+ .469	− .011	4	18.96
6633	BD+71° 761		*9.65*		58 16.41	−0.4081	+ .0668	− .0049	+71 41 2.96	10.153	− .047	+ .152	4	18.61
6634	BD+54° 1788	A0	7.86	8.06	58 25.678	+1.4420	+ .0096	− .003	+54 44 43.93	10.141	+ .186	+ .03	4	18.90
6635	Pi 15ʰ 237	K0	5.10	5.60	58 30.316	3.6262	+ .0172	− .0050	−25 38 36.03	10.136	.460	− .043	4	18.59
6636	BD− 4° 4026	F5	8.2	8.09	15 58 36.144	+3.1654	+ .0088	− .0019	− 4 35 43.51	−10.128	+ .402	− .052	4	19.36
6637	BD− 2° 4094	K2	8.0	8.0	58 38.599	3.1180	+ .0081	− .0016	− 2 14 54.83	10.125	.397	+ .004	4	18.85
6638	BD+45° 2361 m.		*9.56*		58 47.861	1.8899	+ .0045	− .005	+45 42 41.78	10.113	.242	+ .03	4	18.65
6639	BD+18° 3104	A0	7.40	7.48	59 2.026	2.6901	+ .0039	− .002	+18 20 6.21	10.096	.343	+ .01	4	18.40
6640	BD+50° 2245	G0	*9.65*		59 3.558	1.6712	+ .0066	− .006	+50 31 9.04	10.094	.215	+ .04	4	18.69
6641	BD−14° 4339	G5	8.9	9.3	15 59 18.388	+3.3800	+ .0122	+ .0015	−14 53 45.66	−10.075	+ .430	+ .016	4	18.17
6642	BD+64° 1106	G0	*9.25*	9.1	59 22.26	0.7060	+ .0251	− .0143	+63 58 37.93	10.070	.093	+ .013	4	18.18
6643	BD+44° 2535	G5	9.1	8.43	59 34.311	1.9517	+ .0040	− .008	+44 7 6.87	10.055	.250	− .11	4	18.09
6644	BD+32° 2667	G5	*8.58*	8.70	15 59 36.899	2.3284	+ .0029	− .0137	+32 46 16.58	10.052	.298	+ .100	4	18.02
6645	BD+ 7° 3082	F2	8.3	7.75	16 0 22.377	2.9183	+ .0058	− .005	+ 7 35 38.80	9.994	.373	− .05	4	18.28
6646	Pi 15ʰ 266	*	5.85	5.90	16 0 22.808	+2.2045	+ .0030	+ .0011	+36 51 6.08	− 9.993	+ .282	− .022	5	18.83
6647	θ Draconis	F8	4.11	4.38	0 23.223	1.1616	+ .0143	− .0402	+58 46 42.06	9.993	.151	+ .337	4	18.62
6648	BD+ 9° 3141	K0	*9.16*		0 23.230	2.8824	+ .0054	− .003	+ 9 19 53.71	9.993	.368	− .06	4	17.83
6649	BD+65° 1096 br.	G5	*9.30*	9.3	0 23.89	0.5027	+ .0308	− .0079	+65 44 11.01	9.992	.068	+ .003	4	18.25
6650	BD+25° 3020	G0	7.06	6.98	0 45.075	2.5207	+ .0032	− .0388	+25 27 28.11	9.966	.323	+ .698	4	18.12
6651	β¹ Scorpii br.	B1	2.90	3.05	16 0 46.923	+3.4853	+ .0139	− .0008	−19 35 14.95	− 9.963	+ .445	− .029	9 8	19.84 20.30
6652	BD+52° 1930	G5	*9.57*	9.2	0 49.591	1.5641	+ .0077	+ .001	+52 27 1.11	[illegible]	.202	.00	4	18.32
6653	BD− 6° 4360	K0	8.4	8.30	1 27.355	3.2126	+ .0094	− .002	− 6 52 7.50	9.912	.412	+ .03	4	18.70
6654	BD+28° 2514	M0	*8.87*	9.1	1 40.512	2.4585	+ .0030	− .0002	+27 51 21.19	9.895	.316	− .006	4	18.76
6655	Rad (45) 3498	Ma	6.20	6.11	1 41.859	1.0894	+ .0156	− .0041	+59 37 48.12	9.894	.143	− .034	4 5	17.93 18.60
6656	BD+22° 2920 br.	F8	*8.42*	8.01	16 1 47.265	+2.5936	+ .0035	− .004	+22 23 56.96	− 9.887	+ .333	− .04	4	18.34
6657	BD−18° 4235	A2	8.8	8.24	1 48.124	3.4603	+ .0135	− .0005	−18 26 25.93	9.886	.443	− .015	4	18.32
6658	BD+10° 2955	A2	7.02	7.17	2 2.992	2.8644	+ .0052	− .004	+10 9 6.18	9.867	.368	.00	4	18.38
6659	BD− 8° 4157	F0	9.5		2 8.630	3.2424	+ .0097	.000	− 8 17 53.10	9.860	.416	+ .03	4	18.61
6660	BD−16° 4219	A0	7.58	7.8	2 30.120	3.4227	+ .0127	− .0015	−16 43 41.72	9.832	.438	− .034	4	18.36

6602. 12^{m}6, 2″1, 358°.
6607. 9^{m}1-9^{m}9, 1″0, 302°.

6638. 10^{m}2 10^{m}2, 0″5, 356°.
6646. F5, A2.

6649. 12^{m}1, 1″2, 148°.
6651. 8^{m}5, 0″9, 95°, 5^{m}2, 14″, 24°.

6656. 12^m, 3″6, 220°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6661	BD+14° 2992		*9.50*	9.3	16 2 34.057	+2.7749	+0.0045	−0.001	+14 20 36.70	−9.827	+0.357	+0.03	5	17.85
6662	BD+20° 3207	G5	8.85	8.8	2 37.241	2.6503	+ .0037	− .008	+19 55 59.40	9.823	.341	.00	4	18.60
6663	BD+35° 2772	G0	*8.47*	8.08	2 52.690	+2.2496	+ .0030	− .0056	+35 13 37.43	9.803	+ .290	− .268	4	18.45
6664	BD+70° 860		*9.15*	8.7	2 57.77	−0.1521	+ .0531	+ .0027	+70 7 25.40	9.797	− .015	− .037	4	17.32
6665	BD+72° 708		*8.77*	8.93	3 0.35	−0.6864	+ .0771	− .0104	+72 46 4.45	9.794	− .083	+ .048	4	18.33
6666	Brad 2042 *br.*	A0	5.77	5.8	16 3 9.687	+3.3320	+ .0111	− .0036	−12 31 52.60	−9.781	+ .428	− .038	4	18.17
6667	BD+42° 2672	G5	9.2	8.9	3 29.871	2.0057	+ .0038	− .013	+42 25 36.95	9.756	.260	− .03	4	19.02
6668	CD−28° 11897	G0	8.6	7.7	3 31.770	3.7134	+ .0184	− .0004	−28 45 29.84	9.754	.476	− .068	4	19.10
6669	BD+60° 1654	G0	*9.00*		3 38.02	1.0120	+ .0170	− .007	+60 27 37.77	9.746	.133	+ .04	4	18.35
6670	Lal 29345	B9	5.79	6.35	3 56.798	3.5802	+ .0155	− .0012	−23 28 22.15	9.722	.460	− .028	4	18.21
6671	BD− 9° 4305 *m.*	F8	6.63	6.88	16 4 4.578	+3.2765	+ .0102	+ .004	− 9 53 15.50	−9.712	+ .422	− .11	4	18.18
6672	BD+57° 1637	A0	*9.22*	9.21	4 7.389	1.2794	+ .0119	− .003	+56 53 52.36	9.708	.167	+ .01	4	18.05
6673	BD+30° 2755	A3	*9.6*	8.8	4 27.156	2.3952	+ .0030	− .0009	+30 4 15.25	9.683	.309	− .046	4	18.18
6674	κ Herculis *s. pr.*	G5	5.34	5.14	4 27.818	2.7092	+ .0041	− .0031	+17 15 33.18	9.683	.349	− .014	4	18.17
6675	BD−0° 3059	K0	9.3	9.2	4 39.456	3.0870	+ .0075	+ .0019	− 0 41 57.28	9.668	.399	+ .007	4	18.66
6676	BD+ 2° 3053	K5	8.5	8.43	16 4 45.760	+3.0306	+ .0069	− .0006	+ 2 3 27.71	−9.660	+ .392	− .014	4	18.21
6677	CD−27° 10819	G0	10.3		4 58.490	3.6801	+ .0175	− .0044	−27 24 14.63	9.643	.474	− .085	4	18.66
6678	Lal 29437	G5	6.02	6.22	5 14.693	2.9369	+ .0059	+ .0155	+ 6 36 21.93	9.623	.380	− .734	4	18.17
6679	BD+38° 2727		*9.82*		5 19.449	2.1628	+ .0032	− .003	+37 48 40.80	9.616	.281	.00	5 6	19.94 20.16
6680	Wi (2) 16^h 82 *m.*	K0	7.35	7.00	5 29.227	1.8753	+ .0046	− .0011	+45 35 28.24	9.604	.244	+ .013	4	18.39
6681	BD+25° 3036	G5	*9.21*	9.1	16 5 31.166	+2.5221	+ .0033	+ .0005	+25 8 28.08	−9.602	+ .327	− .022	4	18.45
6682	BD+ 4° 3123	G0	9.1	9.2	5 40.090	2.9900	+ .0065	+ .0002	+ 4 1 47.93	9.590	.387	− .051	4	18.74
6683	BD−20° 4422	K5	9.8		5 57.726	3.5116	+ .0140	+ .0015	−20 29 36.98	9.568	.453	− .042	4	18.41
6684	BD+11° 2926	A0	*8.73*	8.31	5 58.036	2.8429	+ .0051	− .002	+11 4 25.89	9.567	.368	− .01	4	18.31
6685	τ Cor Bor *br.*	K0	4.94	5.03	6 2.680	2.1974	+ .0032	− .0051	+36 41 36.34	9.561	.286	+ .319	5	19.36
6686	87 B Draconis	A0	5.40	5.40	16 6 5.94	+0.1622	+ .0401	− .0064	+68 1 15.25	−9.557	+ .025	+ .058	12	18.84
6687	φ Herculis	B9	4.26	4.17	6 14.840	+1.8917	+ .0046	− .0021	+45 8 38.38	9.546	+ .247	+ .023	4	18.50
6688	BD+76° 590		*7.90*	7.21	6 22.93	−1.6425	+ .1271	− .0099	+76 0 3.24	9.535	− .206	− .060	4	18.40
6689	BD−14° 4362	G5	8.6	8.40	6 28.412	+3.3697	+ .0115	+ .0030	−14 10 29.77	9.528	+ .435	− .039	4	18.40
6690	Wi (2) 16^h 117	F5	6.85	6.70	6 35.696	+2.0394	+ .0037	− .0177	+41 18 11.07	9.519	.266	+ .059	4	18.39
6691	Wi (2) 16^h 102	K0	6.68	6.38	16 6 45.898	+2.4745	+ .0032	− .0028	+26 57 0.98	−9.506	+ .321	+ .032	4	18.57
6692	BD− 3° 3888	K5	8.4	7.81	7 1.876	3.1505	+ .0082	− .0013	− 3 46 55.27	9.485	.409	+ .035	4	18.61
6693	ν Scorpii *m.*	B3	4.29	4.50	7 20.555	3.4842	+ .0133	− .0008	−19 15 13.29	9.461	.452	− .032	4	19.39
6694	CD−24° 12604	K0	9.4		7 35.610	3.6198	+ .0159	− .0006	−24 53 41.97	9.442	.469	+ .001	4	18.58
6695	BD+32° 2688	A2	*7.90*	7.65	7 49.156	2.3297	+ .0030	.000	+32 12 36.58	9.425	.304	− .01	4	18.32
6696	BD+ 1° 3173	K0	9.54	9.1	16 7 57.679	+3.0549	+ .0070	− .0023	+ 0 51 57.50	−9.414	+ .397	− .085	4	18.80
6697	BD+49° 2469	G5	7.50	7.03	7 58.034	+1.7241	+ .0058	.000	+48 49 8.12	9.413	+ .226	+ .01	4	18.98
6698	BD+74° 655		9.3	9.3	8 21.76	−1.0872	+ .0931	− .0032	+74 9 6.62	9.383	− .136	+ .010	4	18.83
6699	BD+79° 481		*8.77*	8.66	8 26.49	−2.9416	+ .2171	+ .0018	+78 53 21.43	9.377	− .375	+ .016	4	19.04
6700	BD+18° 3138	G5	*8.71*	8.24	8 27.882	+2.6851	+ .0040	− .001	+18 10 58.95	9.375	+ .349	+ .02	4	18.25
6701	BD+62° 1462		*9.47*		16 8 41.53	+0.7926	+ .0212	− .003	+62 36 7.61	−9.357	+ .106	+ .04	4	19.03
6702	BD+50° 2259	M0	*9.02*		9 13.270	1.6573	+ .0065	+ .002	+50 6 16.92	9.316	.218	− .06	4	18.85
6703	Cape (80) 8824	K0	6.07		9 14.851	3.8355	+ .0203	− .0022	−32 48 29.55	9.314	.498	− .037	4	19.17
6704	BD− 5° 4259	A0	8.8	9.3	9 27.849	3.1977	+ .0088	− .004	− 6 1 34.48	9.297	.416	+ .01	4	19.31
6705	BD−17° 4518	K0	9.0	8.7	9 28.812	3.4573	+ .0127	− .0018	−17 59 40.07	9.296	.451	+ .016	4	18.65
6706	BD−16° 4251	F0	8.6	8.5	16 9 29.509	+3.4167	+ .0120	− .0031	−16 11 54.85	−9.295	+ .446	+ .004	4	18.63
6707	Wi (1) 16^h 102	K0	6.58	6.46	9 30.649	3.0990	+ .0075	− .0035	− 1 16 19.68	9.294	.405	− .011	4	19.10
6708	BD+ 7° 3120	A3	7.33	7.35	9 56.445	2.9231	+ .0057	− .001	+ 7 11 46.50	9.261	.381	+ .02	4	18.39
6709	δ Ophiuchi	Ma	3.03	2.97	10 9.071	3.1450	+ .0079	− .0033	− 3 29 21.49	9.244	.411	− .153	90 65	19.70 19.87
6710	BD+16° 2908	Ma	7.92	7.59	10 14.737	2.7183	+ .0041	.000	+16 38 10.36	9.237	.356	+ .01	4	18.87
6711	BD+31° 2834		8.7	9.15	16 10 15.230	+2.3479	+ .0031	− .0004	+31 25 54.47	−9.236	+ .308	− .025	4	19.37
6712	BD+ 9° 3169	F0	8.37	7.87	10 16.741	2.8691	+ .0052	.000	+ 9 44 34.39	9.234	.376	+ .01	4	19.25
6713	BD+22° 2942	K0	*9.43*		10 23.771	2.5832	+ .0036	+ .001	+22 25 16.98	9.225	.338	− .01	4	19.18
6714	BD+40° 2984		*9.40*	8.9	10 26.428	2.0812	+ .0036	+ .002	+39 53 3.39	9.222	.272	+ .01	4	19.58
6715	BD+58° 1625 *br.*	F8	*8.70*	8.75	11 1.136	1.1716	+ .0131	− .002	+57 59 51.04	9.177	.155	.00	4	19.40
6716	BD−19° 4348	F0	7.64	7.6	16 11 9.978	+3.5024	+ .0134	− .0006	−19 52 34.22	−9.165	+ .458	− .051	4	18.79
6717	13 Herculis	F0	7.43	7.77	11 14.881	2.8267	+ .0049	− .0005	+11 41 30.90	9.159	.370	− .078	4	18.55
6718	Brad 2067	G0	5.56	5.81	11 16.229	3.2431	+ .0093	+ .0154	− 8 9 30.93	9.157	.425	− .516	4	19.63
6719	BD+56° 1875	B9	*9.67*		11 27.588	1.3140	+ .0108	− .003	+55 56 2.12	9.142	.175	− .02	4	19.61
6720	BD+46° 2159		*9.76*	9.1	11 37.895	1.8153	+ .0051	− .006	+46 35 3.99	9.129	.240	+ .03	4	19.66

6666. 8^m0, 3″3, 258°.
6671. 7^m3–7^m4, 0″2, 6°.

6674. 6^m52, 29″, 11°.
6680. 8^m0–8^m2, 0″4, 279°.

6685. 13^m, 3″2, 171°.
6693. 4^m5–6^m0, 1″1, 3°; 6^m49, 41″, 337°.

6715. 11^m0, 5″9, 57°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6721	σ Cor Bor............m.f.	G0	5.76	5.60	16 11 40.920	+2.2683	+0.0031	−0.0232	+34 3 38.25	−9.125	+0.298	−0.094	7	21.03
6722	BD− 9° 4339..........	G5	8.2	8.3	12 13.328	+3.2826	+ .0097	− .002	− 9 59 25.92	9.083	+ .430	− .04	4	19.32
6723	BD+69° 837..........		*9.32*		12 18.06	−0.1400	+ .0483	+ .0100	+69 39 7.26	9.077	− .014	+ .001	4	19.42
6724	BD−12° 4469..........	F5	9.5	9.1	12 18.265	+3.3335	+ .0105	.0000	−12 20 44.36	9.076	+ .437	.000	4	19.82
6725	BD− 3° 3908..........		10.0		12 32.067	3.1390	+ .0079	+ .0077	− 3 10 59.59	9.059	.412	− .129	4	18.87
6726	Brad 2075..............	K0	6.59	6.63	16 12 51.960	+2.5584	+ .0035	− .0011	+23 19 14.73	−9.033	+ .337	− .024	4	19.31
6727	BD+66° 941	G0	*8.05*	8.02	12 54.09	0.2868	+ .0338	− .0069	+66 49 1.31	9.030	.041	− .086	4	18.95
6728	BD+29° 2799....... ..	F5	8.36	8.90	12 54.133	2.3893	+ .0031	+ .0001	+29 48 22.31	9.030	.314	− .016	4	18.58
6729	BD+34° 2755...... ...		*9.58*		12 58.830	2.2702	+ .0031	+ .002	+33 55 22.73	9.024	.300	.00	4	18.61
6730	CD−23° 12833..........	K0	9.3	8.5	12 59.288	+3.6027	+ .0149	+ .0009	−23 56 59.47	9.023	+ .473	− .039	4	19.58
6731	19 Urs Min..............	B8	5.51	5.61	16 13 5.11	−1.7428	+ .1248	+ .0015	+76 4 46.27	−9.016	− .223	+ .007	10	18.97
6732	BD+15° 2972..........	G5	8.54	8.29	13 5.905	+2.7532	+ .0044	− .005	+14 59 18.02	9.015	+ .363	− .02	4	19.23
6733	Pi 16ʰ 31..............	A0	4.87	5.7	13 20.018	3.7188	+ .0171	− .0026	−28 24 57.88	8.996	.489	− .109	4	19.39
6734	BD+20° 3236..........	K0	8.60	8.33	13 20.206	2.6381	+ .0038	.000	+19 59 55.40	8.996	.348	− .04	4	19.35
6735	BD+28° 2543..........	K2	9.8	9.3	13 36.252	2.4366	+ .0031	− .0024	+28 1 48.99	8.975	.322	− .003	4	18.96
6736	BD+ 2° 3071..........		*9.58*		16 13 39.813	+3.0256	+ .0066	− .0002	+ 2 15 20.23	−8.970	+ .398	+ .031	4	19.20
6737	BD− 8° 3170	K0	7.7	7.44	13 44.371	2.9062	+ .0056	− .004	+ 7 55 47.35	8.964	.382	+ .02	4	19.05
6738	Grmb 2325..............	F0	7.04	7.08	13 49.992	1.4609	+ .0087	+ .0007	+53 26 7.34	8.957	.194	− .066	4	19.36
6739	BD+54° 1803.........	G5	*9.25*		13 58.331	1.3890	+ .0096	+ .001	+54 36 59.28	8.946	.185	− .02	4	19.56
6740	BD+36° 2719..........		*9.19*	9.3	14 0.392	2.2017	+ .0032	.000	+36 3 56.14	8.944	.292	+ .01	4	19.61
6741	ε Ophiuchi..............	K0	3.34	3.41	16 14 5.166	+3.1668	+ .0080	+ .0053	− 4 29 54.62	−8.937	+ .418	+ .032	69 57	19.05 19.23
6742	BD−22° 4149..........	G5	9.3		14 5.485	3.5698	+ .0142	.0000	−22 33 58.24	8.937	.470	+ .016	4	19.86
6743	BD+13° 3110..........	A3	8.0	8.68	14 21.417	2.7909	+ .0046	− .003	+13 14 49.74	8.916	.368	− .01	4	19.10
6744	BD+23° 2918..........	K2	7.19	7.06	14 27.691	2.5447	+ .0034	+ .001	+23 48 5.24	8.908	.336	+ .04	4 5	19.34 18.58
6745	55 G Scorpii..........br.	F2	5.69	5.83	14 28.857	3.7839	+ .0183	+ .0052	−30 42 49.15	8.906	.498	+ .004	4	19.19
6746	CD−25° 11473..........	G5	8.2	7.87	16 14 30.887	+3.6455	+ .0156	− .0069	−25 33 58.74	−8.904	+ .480	− .054	4	19.50
6747	Brad 2099..............	K2	6.51	6.22	14 31.74	−1.5270	+ .1105	− .0101	+75 24 33.99	8.903	− .196	+ .025	8	19.08
6748	Wi (2) 16ʰ 367..........	G0	6.93	6.65	14 38.806	+2.3246	+ .0031	+ .0126	+31 59 32.11	8.893	+ .307	+ .306	4	18.35
6749	Lal 29696..	A0	6.89	7.30	14 56.583	3.4768	+ .0124	− .0001	−18 38 6.12	8.870	.458	− .007	4	19.18
6750	BD−15° 4301..........	A0	10.0		14 59.428	3.4018	+ .0113	+ .0023	−15 21 14.80	8.866	.448	+ .039	4	19.69
6751	BD+16° 2924..........	K0	*8.16*	8.58	16 15 7.314	+2.7105	+ .0041	+ .001	+16 48 33.11	−8.856	+ .359	− .03	4	19.54
6752	BD+42° 2696..........	F2	8.3	8.32	15 38.724	1.9605	+ .0041	− .004	+42 49 13.51	8.815	.261	+ .03	4 5	19.13 19.56
6753	BD+22° 2955..........	K0	*8.82*	8.91	15 45.222	2.5881	+ .0036	.000	+21 58 54.56	8.807	.343	− .01	5 4	19.32 19.60
6754	BD+35° 2804..........		*9.34*	9.1	15 49.272	2.2162	+ .0032	− .001	+35 30 11.79	8.801	.294	+ .05	4	19.48
6755	BD−13° 4406..........	F0	8.8	8.8	15 51.664	3.3607	+ .0106	+ .0014	−13 29 20.45	8.798	.444	− .033	5	18.49
6756	BD+63° 1261..........	G5	*9.35*	9.5	16 16 1.04	+0.6928	+ .0222	+ .002	+63 13 12.80	−8.786	+ .094	− .08	4	18.69
6757	BD+81° 543..........	G5	*7.92*	7.44	16 15.39	−4.8219	+ .3654	+ .0106	+81 20 40.92	8.767	− .629	− .011	4	18.91
6758	BD+ 7° 3144..........	F8	9.3	9.3	16 15.445	+2.9197	+ .0055	− .003	+ 7 15 22.55	8.767	+ .386	+ .02	4	18.63
6759	σ Scorpii..............br.	B1	3.10	3.25	16 19.323	3.6435	+ .0153	− .0009	−25 24 7.22	8.762	.481	− .032	4	19.46
6760	BD+53° 1861..........	F5	*8.60*	8.88	16 56.730	1.4328	+ .0089	− .002	+53 43 29.38	8.713	.192	+ .01	4	19.01
6761	BD+ 4° 3160..........	F0	*9.48*		16 17 5.874	+2.9773	+ .0060	− .0020	+ 4 31 54.49	−8.701	+ .395	+ .010	4	18.62
6762	BD+30° 2793..........	G5	8.7	8.72	17 17.091	2.3576	+ .0031	− .0059	+30 41 56.93	8.686	.313	+ .046	4	18.53
6763	τ Herculis ....br.	B5	3.91	4.03	17 20.072	1.8033	+ .0052	− .0012	+46 30 11.98	8.682	.240	+ .030	4	19.14
6764	BD+65° 1112	F5	[illegible]	9.2	17 51.01	0.4903	+ .0268	− .0002	+64 58 17.00	8.642	.068	+ .023	4	19.10
6765	BD+27° 2629..........	G0	8.7	8.50	18 0.028	2.4432	+ .0032	+ .0009	+27 33 38.36	8.630	.325	+ .189	4	18.36
6766	σ Serpentis..............	F0	4.80	5.58	16 18 1.188	+3.0471	+ .0067	− .0111	+ 1 12 57.66	−8.628	+ .405	+ .043	4	18.02
6767	BD− 5° 4282..........	K0	8.6	8.92	18 1.645	3.1886	+ .0082	+ .0017	− 5 29 23.04	8.628	.423	− .014	4	18.30
6768	CD−27° 10918..........	K0	8.1	8.3	18 7.695	3.7059	+ .0161	+ .0008	−27 41 33.54	8.620	.492	− .021	4	18.37
6769	BD+11° 2969..........	G0	*8.99*	8.7	18 9.292	2.8373	+ .0049	− .004	+11 2 29.47	8.617	.378	− .05	4	18.42
6770	γ Herculis..............	F0	3.79	3.86	18 23.384	2.6400	+ .0038	− .0034	+19 20 24.45	8.599	.352	+ .039	121 102	19.54 19.72
6771	BD+52° 1961..........	K0	*8.50*	8.38	16 18 31.248	+1.5259	+ .0076	.000	+52 1 24.16	−8.589	+ .205	+ .02	4	18.61
6772	BD− 7° 4274 ....m	F8	9.3		18 31.988	3.2248	+ .0086	− .001	− 7 10 42.61	8.587	.428	− .03	4	18.39
6773	BD+48° 2390..........		9.3		18 42.728	1.7329	+ .0057	− .002	+47 57 46.78	8.574	.232	− .06	4	18.59
6774	BD+41° 2697..........	K0	7.87	7.78	18 43.358	1.9663	+ .0039	+ .001	+41 37 26.64	8.573	.267	− .05	4	18.59
6775	ξ Cor Bor..............	K0	4.72	4.70	18 58.755	2.3443	+ .0032	− .0074	+31 4 36.96	8.552	.313	+ .092	4	19.38
6776	CD−29° 12508..........	F2	8.54	7.90	16 19 4.756	+3.7609	+ .0172	− .0012	−29 58 20.90	−8.544	+ .501	− .072	4	18.60
6777	BD+30° 2882..........		9.4	8.8	19 26.876	2.0768	+ .0046	.000	+30 27 40.44	8.515	.278	− .02	4	18.64
6778	BD+55° 1837..........	G5	*8.56*	9.15	19 28.179	+1.3273	+ .0100	− .006	+55 16 20.65	8.513	+ .179	+ .05	4	18.03
6779	η Urs Min..............	F0	5.04	5.13	19 49.46	−1.7616	+ .1174	− .0188	+75 56 24.03	8.485	− .229	+ .252	9	18.25
6780	23 Herculis..............	A2	6.80	6.40	19 52.117	+2.3008	+ .0032	+ .0010	+32 31 8.38	8.482	+ .308	− .018	4	18.89

6721. 6ᵐ6, 5″1, 220°, for c. g. add −ˢ006, −1″20 (1921.0), p. m. [illegible] for c. g.
6745. 7ᵐ0, 23″, 320°.
6759. 7ᵐ8, 20″, 272°.
6763. 15ᵐ, 6″7, 147°.
6772. 9ᵐ5-11ᵐ5, 1″2, 320°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6781	BD+11° 2977	K0	*7.79*	7.44	16 20 1.362	+2.8202	+0.0047	−0.002	+11 46 35.30	−8.470	+0.376	−0.03	4	18.38
6782	BD+66° 947	F5	*9.25*	8.7	20 16.51	0.3034	+ .0311	+ .0003	+66 22 0.36	8.450	.044	+ .032	4	18.43
6783	Wi (1) 16h 319	F2	7.00	7.2	20 29.620	3.1215	+ .0074	− .0027	− 2 18 14.52	8.432	.416	− .006	4	18.32
6784	BD+43° 2596		*9.30*	9.10	20 35.053	1.9086	+ .0044	− .001	+43 49 52.53	8.425	.256	− .02	4	18.96
6785	BD−21° 4353	A0	8.8		20 39.624	3.5506	+ .0131	− .0080	−21 30 18.99	8.419	.474	− .046	5	17.75
6786	BD−19° 4368	A0	8.71		16 20 45.872	+3.5059	+ .0124	.0000	−19 39 13.86	−8.411	+ .468	− .038	4	18.44
6787	ρ Ophiuchi *s. f.*	B5	5.22	5.3	20 47.127	3.5942	+ .0138	− .0008	−23 15 50.79	8.409	.480	− .021	4	19.08
6788	CD−23° 12862	A	7.13	7.10	20 47.156	3.5932	+ .0138	− .0010	−23 13 19.19	8.409	.480	− .038	4	19.02
6789	BD− 9° 4381 *m.*	F0	8.4	8.25	20 52.283	3.2797	+ .0091	+ .001	− 9 40 53.76	8.402	.438	+ .01	4	18.91
6790	BD+50° 2282	F8	7.34	7.03	20 58.431	1.5991	+ .0068	+ .005	+50 31 44.42	8.394	.215	− .04	4	18.92
6791	BD+47° 2335		9.3		16 21 14.930	+1.7697	+ .0053	− .006	+47 1 14.19	−8.372	+ .238	+ .21	4	19.03
6792	BD+40° 3014		*9.67*		21 27.120	2.0418	+ .0037	− .003	+40 19 19.11	8.356	.273	+ .05	4	18.25
6793	BD+28° 2564	A5	*8.46*	8.77	21 31.265	2.4285	+ .0032	− .0010	+27 56 12.26	8.351	.325	− .012	4	19.31
6794	ω Herculis *br.*	A0	4.53	4.96	21 43.339	2.7648	+ .0044	+ .0030	+14 12 59.62	8.335	.372	− .065	4	17.14
6795	BD−11° 4135	K5	8.4	8.29	21 53.113	3.3157	+ .0096	− .0024	−11 18 18.36	8.322	.443	+ .030	4	18.54
6796	BD− 3° 3940	A2	9.3		16 21 53.223	+3.1436	+ .0075	+ .0010	− 3 20 12.25	−8.322	+ .420	+ .005	4	18.30
6797	BD+59° 1721	G5	*8.40*	8.48	21 56.362	1.0574	+ .0141	− .008	+58 53 46.53	8.317	.144	+ .07	4	18.61
6798	BD+24° 3006	F8	8.56	8.53	22 16.982	2.5121	+ .0034	− .0037	+24 44 19.28	8.290	.337	− .005	4	18.58
6799	BD+ 2° 3103	A0	6.56	7.3	22 19.817	+3.0156	+ .0062	− .0010	+ 2 41 16.99	8.286	+ .404	+ .019	4	18.41
6800	BD+72° 726		*8.75*	9.44	22 37.06	−0.6522	+ .0619	− .0032	+71 53 58.82	8.263	− .083	+ .017	4 5	18.70 19.22
6801	BD+64° 1129	K0	*8.22*	8.36	16 22 37.25	+0.5456	+ .0243	− .0098	+64 16 35.60	−8.263	+ .076	+ .025	4	18.15
6802	98 B Draconis	A2	5.66	5.98	22 40.163	1.3085	+ .0102	+ .0019	+55 23 11.82	8.259	.177	+ .016	4	18.78
6803	η Draconis *br.*	G5	2.89	3.73	22 54.21	0.8108	+ .0185	− .0025	+61 41 41.89	8.240	.111	+ .059	4	18.04
6804	BD+32° 2726		*9.04*	8.97	23 7.996	2.3034	+ .0032	− .009	+32 15 39.94	8.222	.310	+ .04	4	17.90
6805	BD−15° 4324	F5	7.11	7.11	23 41.859	3.4233	+ .0108	+ .0002	−16 2 2.71	8.177	.459	− .032	4	18.13
6806	BD+38° 2775		8.9	8.55	16 23 48.283	+2.1212	+ .0035	+ .002	+37 56 37.76	−8.169	+ .286	+ .03	4	18.42
6807	BD+13° 3150		*9.34*		24 0.234	2.7909	+ .0045	+ .001	+13 0 0.82	8.153	.375	+ .03	4	18.20
6808	BD+58° 1638	A7	*9.43*		24 2.150	1.0708	+ .0137	− .003	+58 37 21.09	8.151	.146	+ .04	4	18.81
6809	BD+41° 2708	G0	*9.16*	8.7	24 2.449	2.0079	+ .0039	+ .004	+41 5 34.85	8.150	.271	− .05	4	18.37
6810	BD− 5° 4300		10.0		24 4.265	3.1944	+ .0079	+ .001	− 5 41 31.62	8.147	.429	+ .01	4	18.75
6811	BD+25° 3084	A7	*9.50*		16 24 5.710	+2.4930	+ .0034	− .0008	+25 23 57.11	−8.146	+ .335	− .021	4	18.44
6812	BD+20° 3269	K2	*9.33*		24 14.950	+2.6151	+ .0036	.000	+20 32 25.14	8.133	+ .352	.00	4	19.06
6813	BD+74° 663		*9.15*		24 29.03	−1.2670	+ .0869	− .0022	+74 16 26.08	8.114	− .165	− .017	4	18.83
6814	α Scorpii *br.*	*	1.22	1.84	24 29.961	+3.6755	+ .0147	− .0005	−26 15 20.44	8.114	+ .494	− .033	15 16	22.15 21.99
6815	BD+17° 3030		*9.12*	9.4	24 33.444	2.6834	+ .0039	− .002	+17 40 5.11	8.108	.361	+ .02	4	18.58
6816	BD+ 9° 3213		*9.17*	8.7	16 24 41.032	+2.8769	+ .0051	− .001	+ 9 6 3.85	−8.098	+ .388	+ .02	4	18.88
6817	BD+19° 3105		9.3	9.5	24 49.568	2.6413	+ .0038	.000	+19 25 59.20	8.087	.356	+ .02	4	18.83
6818	Pulk (55) 2358	G0	5.75	6.08	25 15.445	3.3864	+ .0102	+ .0016	−14 22 34.21	8.052	.455	+ .008	4	18.63
6819	Lac 6856	B8	6.79	6.72	25 17.876	3.7164	+ .0153	− .0019	−27 44 29.63	8.049	.499	− .009	4	19.06
6820	Brad 2092	B3	4.87	5.09	25 20.635	3.6419	+ .0141	− .0004	−24 56 25.09	8.045	.490	− .028	4	19.31
6821	Wi (2) 16h 689	A2	7.11	7.05	16 25 20.759	+2.3872	+ .0032	− .0018	+29 15 4.71	−8.045	+ .322	− .003	4	18.49
6822	BD+ 4° 3191	G5	7.90	7.82	25 36.784	2.9709	+ .0057	− .0010	+ 4 45 3.91	8.024	.400	− .026	5	17.73
6823	BD−17° 4586	G5	9.2	9.1	25 38.977	+3.4666	+ .0112	.000	−17 49 47.22	8.021	+ .466	− .08	4	19.56
6824	BD+77° 625		*9.50*		25 47.31	−2.3676	+ .1436	− .0043	+77 18 36.67	8.010	− .313	+ .074	4	18.89
6825	Wi (1) 16h 429	F5	6.94	7.1	25 55.564	+2.9408	+ .0056	− .0009	+ 6 8 41.50	7.999	+ .397	− .006	4	18.89
6826	BD+51° 2105 *br.*	K0	7.47	7.11	16 25 59.793	+1.5172	+ .0075	− .0021	+51 46 3.46	−7.993	+ .206	+ .033	4	18.26
6827	*g* Herculis	Mb	Var	5.20	26 0.796	1.9670	+ .0041	+ .0020	+42 3 25.43	7.992	.267	− .018	4	19.62
6828	CD−29° 12594	F5	8.8	7.7	26 8.535	3.7754	+ .0162	.0000	−29 49 27.87	7.982	.508	− .070	4	19.31
6829	*N* Scorpii	B3	4.33		26 9.054	3.9162	+ .0189	− .0007	−34 31 52.08	7.981	.527	− .024	4	19.13
6830	BD− 7° 4305	A5	6.39	7.0	26 11.240	3.2306	+ .0082	− .001	− 7 20 27.85	7.978	.436	+ .02	4	19.12
6831	BD+49° 2510		*8.92*	9.3	16 26 24.203	+1.6321	+ .0063	+ .002	+49 35 24.76	−7.961	+ .222	+ .02	4	18.46
6832	BD− 8° 4251	K0	8.8	8.51	26 27.820	3.2654	+ .0086	− .001	− 8 55 38.69	7.956	.440	+ .01	4 5	18.94 20.05
6833	β Herculis	K0	2.81	3.07	26 46.779	2.5852	+ .0036	− .0075	+21 39 47.09	7.931	.350	− .024	100 96	19.41 19.52
6834	BD+10° 3017		*8.75*	8.34	26 49.152	2.8584	+ .0049	− .004	+ 9 54 15.82	7.927	.386	− .03	4	18.52
6835	λ Ophiuchi *br.*	A0	4.00	3.90	26 52.645	3.0265	+ .0062	− .0032	+ 2 9 29.21	7.923	.408	− .084	4	19.56
6836	BD+33° 2739	F5	8.1	8.02	16 27 3.847	+2.2573	+ .0033	.000	+33 35 3.27	−7.908	+ .306	− .04	4	18.38
6837	BD+56° 1892	K0	*7.95*	7.88	27 19.224	1.1968	+ .0113	− .002	+56 46 45.23	7.887	.163	− .03	4	18.40
6838	BD+ 7° 3193	F5	*8.13*	8.07	27 22.485	2.9205	+ .0053	− .004	+ 7 3 47.46	7.882	.395	+ .01	4	18.33
6839	BD+15° 3012		8.7	8.8	27 39.571	2.7425	+ .0042	.000	+15 2 3.83	7.860	.371	− .03	4	18.66
6840	BD+ 0° 3537	K2	*7.98*	7.43	27 43.769	3.0700	+ .0065	+ .0003	+ 0 7 41.32	7.854	.416	− .003	4	18.57

6787. $6^{m}0$, 3″4, 350°.
6789. $8^{m}7$–$9^{m}8$, 0″9, 351°.
6794. $12^{m}0$, 1″6, 186°.
6803. $8^{m}9$, 5″6, 142°.
6814. Ma, A3; $7^{m}0$, 3″2, 273°.
6826. $12^{m}1$, 2″9, 235°.
6827. $4^{m}7$ to $5^{m}5$.
6835. $6^{m}1$, 0″9, 83°; 110 yrs.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6841	BD+31° 2859	F5	7.30	7.25	16 27 48.852	+2.3305	+0.0032	+0.0009	+31 6 45.08	−7.847	+0.316	−0.014	4	18.32
6842	BD−19° 4375	F5	9.47		27 51.971	3.5180	+ .0118	.000	−19 54 11.93	7.843	.476	+ .02	4	18.35
6843	BD+12° 3031	G	*8.39*	8.41	27 53.519	2.7980	+ .0045	− .006	+12 35 28.19	7.841	.379	+ .05	4	18.91
6844	BD+48° 2407	F8	7.03	7.1	27 59.445	1.7003	+ .0058	− .0106	+48 7 50.09	7.833	.231	− .282	4	19.40
6845	Wi (2) 16ʰ 781	K5	6.47	6.08	28 6.802	2.1985	+ .0033	− .0001	+35 23 48.11	7.823	.298	− .039	4	18.94
6846	BD− 1° 3208	G0	8.7		16 28 7.702	+3.1048	+ .0068	− .0052	− 1 29 34.59	−7.822	+ .420	− .070	4	19.18
6847	*A* Draconis	B8	4.98	5.00	28 7.93	−0.1228	+ .0405	− .0045	+68 56 28.30	7.821	− .013	+ .034	13 12	19.69 19.58
6848	BD+45° 2420		9.3	8.8	28 21.265	+1.8220	+ .0048	+ .002	+45 27 27.66	7.804	+ .248	− .05	5	18.00
6849	BD+62° 1486		*9.65*		28 28.72	0.7474	+ .0188	− .007	+62 6 1.38	7.794	.104	− .03	4	18.94
6850	BD+ 3° 3215	K0	9.1	8.70	28 53.472	2.9991	+ .0059	− .0234	+ 3 25 8.72	7.760	.407	− .183	4	18.59
6851	BD+42° 2719	K0	7.63	7.65	16 28 55.090	+1.9502	+ .0042	+ .002	+42 19 58.97	−7.758	+ .265	− .02	4	18.63
6852	CD−24° 12707	K0	8.8	7.9	29 20.590	3.6434	+ .0135	− .0033	−24 49 59.00	7.724	.493	− .076	4	18.79
6853	BD− 4° 4128	K0	8.30	8.02	29 40.532	3.1780	+ .0075	+ .0006	− 4 53 17.30	7.697	.431	+ .017	4	18.88
6854	BD+63° 1278	F0	7.90	7.81	29 42.12	0.5716	+ .0221	− .006	+63 44 25.10	7.695	.080	+ .03	5	18.50
6855	BD−10° 4339	K0	8.2	7.88	29 43.755	3.3017	+ .0069	− .0127	−10 30 38.81	7.693	.448	− .008	4	18.83
6856	BD− 3° 3964	K0	8.2	7.77	16 29 45.776	+3.1509	+ .0073	− .0011	− 3 37 22.50	−7.690	+ .427	− .006	4	18.43
6857	BD+23° 2951	K0	*7.64*	7.94	29 46.436	2.5416	+ .0035	− .002	+23 17 5.79	7.689	.344	+ .02	4 5	19.05 19.50
6858	BD+30° 2835	K2	8.3	8.40	30 38.089	2.3522	+ .0032	+ .0024	+30 14 17.12	7.620	.320	− .028	4	18.75
6859	BD−21° 4389	F5	8.4	8.3	30 43.853	3.5649	+ .0122	− .0057	−21 42 36.93	7.612	.484	− .100	4	18.96
6860	τ Scorpii	B0	2.91	3.67	30 53.914	3.7316	+ .0147	− .0008	−28 3 3.93	7.598	.507	− .037	4	18.67
6861	BD+ 7° 3207	A3	*8.85*	8.40	16 31 7.878	+2.9205	+ .0052	− .004	+ 7 0 52.66	−7.580	+ .397	− .01	4	18.31
6862	Pi 16ʰ 140	A0	5.85	6.0	31 17.59	0.8411	+ .0166	+ .0019	+60 59 26.44	7.566	.117	− .016	4	18.45
6863	BD−15° 4348	K5	9.75		31 26.727	3.4102	+ .0100	+ .0040	−15 15 10.46	7.554	.464	+ .010	4	18.50
6864	σ Herculis	A0	4.25	4.77	31 31.350	1.9343	+ .0042	− .0010	+42 36 5.02	7.548	.265	+ .035	4	18.67
6865	Pi 16ʰ 125	A0	6.27	6.51	31 51.043	2.6888	+ .0040	− .0002	+17 13 16.90	7.521	.366	− .006	4	18.33
6866	BD−18° 4297	A0	8.8		16 31 51.876	+3.5020	+ .0111	− .0002	−19 6 44.85	−7.520	+ .476	− .022	4	18.44
6867	BD−12° 4555		9.5		31 52.978	3.3535	+ .0093	+ .003	−12 46 15.70	7.519	.457	− .06	4	18.60
6868	CD−29° 12680	G5	10.1	ft.	31 57.706	3.7725	+ .0153	− .0032	−29 27 30.62	7.512	.513	− .025	4	19.52
6869	12 Ophiuchi	K0	5.87	5.59	32 9.154	3.1193	+ .0068	+ .0296	− 2 9 17.60	7.497	.425	− .317	4	18.92
6870	BD+26° 2863	M0	9.1	8.73	32 17.442	2.4509	+ .0033	− .0010	+26 38 17.45	7.486	.333	− .030	4	18.56
6871	BD+19° 3130		*9.83*		16 32 28.821	+2.6311	+ .0037	+ .001	+19 36 12.28	−7.470	+ .359	− .01	4	18.97
6872	BD+34° 2815		*8.76*	8.9	32 33.755	2.2286	+ .0033	+ .003	+34 14 23.67	7.463	.305	− .01	4	19.38
6873	BD+ 2° 3140	G5	*8.42*	8.50	32 36.607	3.0252	+ .0060	− .0025	+ 2 11 44.53	7.460	.412	− .021	4	19.24
6874	ζ Ophiuchi	B0	2.70	2.97	32 45.090	3.3006	+ .0066	+ .0008	−10 24 22.27	7.448	.450	+ .017	108 81	19.35 19.58
6875	BD−11° 4175	K5	8.4	7.91	32 49.549	+3.3179	+ .0088	+ .0001	−11 10 46.71	7.442	+ .453	.000	4	19.00
6876	BD+72° 735		*9.22*		16 32 50.34	−0.8922	+ .0641	− .0056	+72 37 19.37	−7.441	− .117	+ .034	4	18.71
6877	BD+39° 3017		*8.76*	8.53	33 6.611	+2.0418	+ .0038	− .003	+39 42 20.72	7.419	+ .279	− .01	4	18.46
6878	CD−23° 12878	A0	9.5		33 23.590	3.6025	+ .0124	− .0003	−23 6 2.91	7.396	.491	− .026	4	19.64
6879	BD+50° 2310	K5	*9.70*		33 24.649	1.5846	+ .0066	+ .001	+50 8 54.45	7.394	.218	− .01	4	19.39
6880	BD+66° 959	G5	*8.82*	9.21	33 26.51	0.2538	+ .0284	+ .0040	+66 13 9.42	7.392	.037	− .059	4	19.41
6881	Wi (2) 16ʰ 943	K0	6.89	6.86	16 33 29.581	+2.5446	+ .0035	+ .0076	+23 1 55.58	−7.388	+ .348	− .147	4	18.13
6882	BD+11° 3016		*9.58*		33 41.159	2.8202	+ .0046	.000	+11 29 11.07	7.372	.386	+ .05	4	19.12
6883	Wi (1) 16ʰ 570	A0	6.00	6.17	33 44.372	3.2116	+ .0076	− .0004	− 6 22 41.04	7.368	.438	− .008	4	18.98
6884	Grmb 2362	G5	5.95	6.03	33 51.054	+1.7502	+ .0052	− .0015	+46 46 28.65	7.359	+ .240	+ .012	4	19.13
6885	70 B Urs Min	G5	6.39	[illegible]	34 3.66	−2.5865	+ .1423	− .0299	+77 36 23.63	7.342	− .348	+ .270	9	20.05
6886	Wi (1) 16ʰ 598	F2	6.20	6.14	16 34 6.719	+2.7661	+ .0042	− .0018	+13 50 53.33	−7.337	+ .379	− .067	4 5	19.15 20.21
6887	BD+38° 2807		*8.50*	8.88	34 24.707	2.0976	+ .0036	.000	+38 5 8.99	7.313	.289	− .02	4	18.39
6888	CD−27° 11054	B9	8.1	7.94	34 34.190	3.7103	+ .0138	− .0020	−27 7 39.60	7.300	.506	− .040	5	19.99
6889	BD− 0° 3155	G5	8.4	8.66	34 44.145	3.0871	+ .0064	+ .0006	− 0 40 37.09	7.286	.422	+ .002	4	18.93
6890	BD+31° 2879	F0	*9.49*		34 45.315	2.3174	+ .0032	− .0005	+31 14 38.27	7.285	.318	− .024	4	19.28
6891	BD+67° 955		*8.27*	8.8	16 34 54.25	+0.0592	+ .0327	+ .0003	+67 32 53.69	−7.273	+ .011	+ .013	4	18.92
6892	Lal 30653	A2	7.15	7.42	[illegible]	1.8815	+ .0044	+ .0016	+43 43 24.60	7.266	.258	+ .038	4	18.95
6893	BD+ 1° 3276		*9.50*		34 59.988	3.0525	+ .0061	− .0014	+ 0 55 40.24	7.265	.417	− .009	4 5	18.91 19.38
6894	Cape (80) 9039	K0	6.60		35 0.297	3.8998	+ .0170	.0000	−33 35 12.13	7.205	.533	− .005	4	19.69
6895	BD− 8° 4285	A2	10.5		35 35.921	3.2538	+ .0079	+ .004	− 8 15 59.73	7.216	.446	.00	4	[illegible]
6896	BD− 2° 4227	G5	8.8		16 35 40.163	+3.1315	+ .0067	− .0022	− 2 42 0.92	−7.210	+ .429	− .049	4	18.14
6897	BD+37° 2784	K0	*8.41*	8.37	35 41.687	2.1208	+ .0035	.000	+37 21 31.52	7.208	.291	.00	4	18.61
6898	BD+24° 3038	F5	7.96	7.70	35 46.364	2.4950	+ .0031	− .0033	+24 51 19.23	7.202	.342	− .008	4	18.57
6899	BD+56° 1905	K0	*8.34*	8.40	35 51.897	1.2295	+ .0101	− .001	+56 54 52.49	7.195	.171	.00	4	[illegible]
6900	BD+17° 3067	K5	*8.16*	7.68	36 18.052	2.6915	+ .0039	− .004	+16 58 53.65	7.159	.369	.00	4	18.31

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6901	BD+ 7° 3219	K5	*8.46*	8.12	16 36 21.068	+ 2.9021	+0.0049	−0.003	+ 7 46 53.88	−7.155	+0.398	−0.01	4	18.58
6902	BD+49° 2530	Ma	6.73	6.48	36 21.411	1.6357	+ .0060	+ .0003	+49 1 11.13	7.155	.226	− .029	4	18.58
6903	Grmb 2369	G5	5.44	5.35	36 23.299	+ 1.2099	+ .0104	− .0017	+56 10 17.10	7.151	+ .168	+ .082	4	18.20
6904	Schwerd 986	G0	6.95	6.65	36 25.53	− 3.9756	+ .2250	+ .0365	+79 57 18.95	7.149	− .539	− .077	9	18.75
6905	42 Herculis	Ma	5.14	5.04	36 34.423	+ 1.6319	+ .0060	− .0036	+49 5 3.39	7.136	+ .225	+ .027	5	19.49
6906	Brad 2117	A0	5.73	5.77	16 36 40.288	+ 2.9772	+ .0055	− .0004	+ 4 22 29.22	−7.128	+ .409	− .015	4	18.17
6907	BD− 4° 4143	K5	9.0	8.8	36 41.580	3.1698	+ .0070	+ .0002	− 4 26 43.06	7.127	.435	− .050	4	18.41
6908	BD−13° 4476	K5	8.3	8.75	36 52.338	3.3667	+ .0090	− .0001	−13 14 23.84	7.112	.462	+ .049	4	18.36
6909	24 Scorpii	K0	5.04	5.52	36 56.616	3.4688	+ .0102	− .0017	−17 35 18.30	7.106	.476	− .007	4	18.16
6910	BD+21° 2962	K5	8.28	7.80	37 1.133	2.5764	+ .0035	.000	+21 39 40.72	7.100	.354	.00	4	18.31
6911	BD+33° 2766		*9.33*	9.3	16 37 22.855	+ 2.2552	+ .0033	.000	+33 10 28.35	−7.071	+ .310	− .02	4	18.21
6912	BD+81° 555		*9.57*		37 24.73	− 5.6647	+ .3547	− .0070	+81 51 18.34	7.068	− .770	+ .043	4	18.77
6913	BD+84° 365		*8.60*	8.62	37 27.65	− 9.1575	+ .7274	+ .0151	+84 9 41.34	7.064	−1.246	+ .010	4	18.59
6914	BD+ 5° 3254	A0	6.75	6.95	37 32.940	+ 2.9627	+ .0054	− .0002	+ 5 1 32.11	7.057	+ .407	− .018	4	18.49
6915	BD+28° 2600	K0	9.2		37 53.875	2.3826	+ .0033	− .0015	+28 52 19.84	7.028	.327	− .024	4	17.59
6916	BD+60° 1692		*9.25*		16 38 1.49	+ 0.8490	+ .0154	− .005	+60 37 28.11	−7.018	+ .119	.00	4	18.61
6917	BD+42° 2735	K0	8.3	7.63	38 7.559	1.9335	+ .0042	− .002	+42 17 59.71	7.010	.267	− .04	4	18.39
6918	ζ Herculis *br.*	G0	3.07	3.33	38 16.189	2.2979	+ .0033	− .0366	+31 44 47.87	6.998	.317	+ .384	4	17.85
6919	BD−21° 4403	F8	8.2		38 16.465	3.5582	+ .0113	− .0010	−21 11 29.83	6.997	.489	− .068	4	18.20
6920	BD+13° 3198	G5	8.3	8.66	38 39.838	+ 2.7790	+ .0042	− .004	+13 11 34.55	6.965	+ .382	.00	4	18.81
6921	BD+86° 246		*9.55*		16 38 49.98	−17.439	+2.108	− .010	+86 30 11.20	−6.952	−2.379	− .024	4	18.46
6922	BD+47° 2367	F8	*8.71*	8.43	39 2.935	+ 1.6988	+ .0055	− .001	+47 36 59.94	6.934	+ .235	+ .06	4	18.33
6923	CD−27° 11104	A0	10.8	ft.	39 21.722	3.7198	+ .0133	− .0050	−27 17 12.75	6.908	.511	− .052	4	18.66
6924	BD+59° 1746	G0	*8.22*	7.89	39 31.336	0.9690	+ .0132	+ .004	+59 11 5.57	6.895	.136	+ .14	4	18.08
6925	BD+45° 2442		9.1		39 37.238	1.8028	+ .0048	− .006	+45 20 21.71	6.887	.250	+ .03	4	18.12
6926	BD+10° 3055	K2	*8.36*	8.6	16 39 48.288	+ 2.8372	+ .0045	− .002	+10 37 26.22	−6.872	+ .392	− .02	4	17.90
6927	Pi 16^{h} 159	A2	5.96	6.31	39 59.820	3.7506	+ .0137	− .0031	−28 21 42.92	6.856	.517	+ .009	4	18.21
6928	η Herculis	K0	3.61	3.82	40 9.103	2.0529	+ .0037	+ .0029	+39 4 25.62	6.843	.284	− .095	5	18.86
6929	BD+20° 3325	F8	8.40	8.83	40 19.991	2.6158	+ .0036	− .001	+19 59 1.88	6.828	.361	+ .02	4	17.86
6930	CD−25° 11653	G5	9.55		40 30.553	3.6646	+ .0124	− .0051	−25 13 13.25	6.814	.505	.000	4	18.02
6931	BD+54° 1830	G0	*9.14*		16 40 43.200	+ 1.3026	+ .0089	+ .012	+54 37 1.34	−6.797	+ .181	+ .01	4	18.20
6932	Pi 16^{h} 177	F2	5.90	6.12	40 54.534	2.2185	+ .0033	− .0060	+34 11 7.74	6.781	.307	+ .050	4	18.15
6933	BD− 8° 4305	F5	8.8		41 28.782	3.2568	+ .0076	+ .002	− 8 19 20.53	6.734	.450	.00	4	18.38
6934	BD−16° 4344	K5	8.7	8.36	41 28.838	3.4516	+ .0096	+ .0001	−16 45 17.94	6.734	.477	− .048	4	17.75
6935	BD+ 6° 3289	F0	8.9	8.85	41 36.920	2.9218	+ .0050	− .003	+ 6 50 4.19	6.723	.405	− .01	4	18.31
6936	BD− 0° 3178 *m.*	F8	7.9	8.58	16 41 38.952	+ 3.0863	+ .0061	+ .0055	− 0 37 3.95	−6.720	+ .427	− .085	4	18.30
6937	BD−15° 4388		10.1		41 49.250	3.4186	+ .0093	+ .0037	−15 21 31.49	6.706	.472	+ .024	4	18.34
6938	BD+38° 2828	G5	8.7	8.28	41 55.109	2.0612	+ .0037	− .002	+38 46 7.73	6.698	.286	+ .03	4	18.66
6939	BD−18° 4324	G0	9.2		41 59.349	3.4977	+ .0101	− .0038	−18 38 36.60	6.691	.483	− .044	4	18.52
6940	Brad 2131	K2	5.38	5.32	41 59.357	2.8793	+ .0047	− .0001	+ 8 43 39.03	6.691	.399	+ .016	4	17.90
6941	BD+21° 2982	A5	*9.14*	9.2	16 42 23.695	+ 2.5693	+ .0035	− .001	+21 46 13.36	−6.659	+ .357	− .01	4	18.38
6942	BD+57° 1700	F0	*9.20*	8.56	42 29.598	1.0722	+ .0115	+ .001	+57 46 53.67	6.650	.150	.00	4	18.62
6943	BD+41° 2746		*9.40*	9.2	42 38.964	1.9563	+ .0040	− .003	+41 31 12.08	6.638	.272	.00	4	18.62
6944	BD− 6° 4497	K0	8.3	8.07	42 52.343	+ 3.2238	+ .0072	− .001	− 6 49 52.88	6.619	+ .446	− .02	4	18.11
6945	BD+78° 565	K0	*7.94*	8.03	42 54.89	− 2.8711	+ .1417	− .0331	+78 1 4.18	6.616	− .392	+ .100	4	17.69
6946	Brad 2135	A2	6.04	6.20	16 43 7.681	+ 3.0241	+ .0056	− .0021	+ 2 12 28.18	−6.598	+ .419	− .019	4	17.87
6947	BD+16° 3020		*9.65*		43 9.581	2.7018	+ .0039	+ .001	+16 22 46.97	6.596	.375	.00	4	18.30
6948	BD+10° 3069		*9.36*	8.6	43 27.840	2.8390	+ .0045	− .002	+10 29 11.11	6.571	.394	+ .01	4	18.51
6949	114 B Draconis	F0	4.88	5.31	43 46.614	1.1333	+ .0106	+ .0033	+56 55 27.61	6.544	.159	+ .056	4	18.38
6950	*l* Herculis	A0	5.28	6.0	43 50.016	2.9535	+ .0051	− .0016	+ 5 23 21.40	6.540	.410	− .045	4	18.21
6951	BD+47° 2381	F5	7.96	8.00	16 44 8.634	+ 1.6845	+ .0054	+ .005	+47 41 8.47	−6.514	+ .235	+ .04	4	18.33
6952	BD+33° 2782		*8.70*	8.90	44 11.558	2.2531	+ .0033	+ .002	+32 57 48.82	6.510	.313	− .01	4	18.15
6953	BD−22° 4219	F2	8.6		44 23.982	3.5982	+ .0111	− .0008	−22 34 16.56	6.493	.499	− .022	4	18.46
6954	Lal 30568	G5	7.26	6.82	44 37.596	3.1694	+ .0066	− .0006	− 4 22 25.63	6.474	.440	− .091	4	18.40
6955	Oelt 12851	Ma	7.60	7.26	44 48.540	+ 3.5765	+ .0107	− .0028	−21 42 46.65	6.459	+ .497	− .034	4	18.82
6956	BD+85° 278	F8	*8.60*	8.5	16 44 49.61	−14.058	+1.336	+ .050	+85 46 34.85	−6.458	−1.937	+ .046	4	18.22
6957	BD+76° 620		*8.60*	8.78	44 54.47	− 2.1242	+ .1031	+ .0099	+76 18 59.88	6.451	− .289	+ .005	4	18.65
6958	BD+28° 2614	A3	*8.62*	8.1	44 54.691	+ 2.3993	+ .0033	− .0001	+28 1 19.47	6.451	+ .234	+ .003	4	18.11
6959	ε Scorpii	K0	2.36		44 58.798	3.9310	+ .0156	− .0496	−34 8 57.00	6.445	.545	− .259	4	18.92
6960	BD+ 3° 3279		*9.62*		45 0.676	2.9977	+ .0053	− .0011	+ 3 23 24.72	6.442	.417	+ .011	4	18.18

6918. $6^{m}0$, $1''5$, 89°; 34 yrs.; for c. g. add $+^{s}035$, $-''09$ (1917.85); p. m. is for c. g.

6936. $8^{m}6$–$8^{m}6$, $0''2$, 355°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
6961	BD+18° 3244	F8	7.60	7.71	16 45 10.546	+2.6502	+0.0037	−0.001	+18 27 28.90	−6.429	+0.369	+0.02	4	18.83
6962	BD+55° 1878	K2	6.99	7.18	45 12.842	1.2274	+ .0094	+ .0045	+55 33 4.67	6.426	.172	− .003	4	19.28
6963	BD+26° 2904	K2	7.90	7.48	45 16.933	2.4349	+ .0033	+ .0023	+26 44 21.67	6.420	.338	− .013	4	18.81
6964	BD− 2° 4254	A2	8.8	8.9	45 17.390	3.1302	+ .0062	− .0014	− 2 35 53.61	6.419	.435	− .038	4	18.81
6965	20 Ophiuchi	F5	4.73	5.13	45 24.348	3.3107	+ .0078	+ .0058	−10 38 33.06	6.409	.460	− .102	4	18.49
6966	BD+24° 3060	K0	9.2	8.80	16 45 34.476	+2.4981	+ .0034	− .0001	+24 24 7.82	−6.395	+ .347	− .001	4	18.81
6967	CD−24° 12862	A0	9.1	8.4	45 36.203	3.6467	+ .0115	− .0031	−24 22 42.14	6.393	.507	+ .010	4	19.03
6968	BD+31° 2911		9.2	8.7	45 51.082	2.2993	+ .0032	− .0002	+31 24 6.01	6.373	.320	− .010	4	18.57
6969	BD+14° 3125	K0	7.87	7.68	46 21.310	2.7525	+ .0040	− .002	+14 10 22.21	6.331	.383	− .04	4	18.17
6970	k Herculis	A0	5.46	5.62	46 26.221	2.9084	+ .0047	+ .0035	+ 7 23 5.32	6.324	.405	− .008	4	18.62
6971	BD+46° 2219	G	9.1	8.93	16 46 49.120	+1.7425	+ .0050	− .002	+46 21 11.48	− 6.292	+ .245	+ .07	4	18.56
6972	BD+70° 898		9.02	9.1	46 54.63	−0.5483	+ .0435	− .0038	+70 41 15.48	6.285	− .073	+ .007	4	18.40
6973	BD−12° 4604	K2	8.3	8.72	46 56.466	+3.3555	+ .0081	− .0010	−12 33 51.09	6.282	+ .467	− .002	4	17.78
6974	BD+22° 3025	F2	9.5		46 57.580	2.5413	+ .0034	.000	+22 43 22.30	6.281	.355	+ .01	4	18.52
6975	BD+ 5° 3283	K2	8.46	8.45	47 6.668	2.9634	+ .0050	+ .0016	+ 4 55 13.57	6.268	.413	− .087	4	18.50
6976	BD+45° 2454		9.3		16 47 11.688	+1.8041	+ .0046	+ .001	+44 58 49.63	−6.262	+ .252	− .03	4	18.62
6977	BD+36° 2787	K2	7.90	7.75	47 14.648	2.1444	+ .0034	+ .002	+36 10 34.69	6.257	.300	.00	4	18.62
6978	BD+54° 1838	F	8.52	8.11	47 17.790	1.3145	+ .0083	.000	+54 9 58.70	6.253	.184	+ .06	4	17.87
6979	BD+12° 3097		8.86		47 24.460	2.7880	+ .0041	− .001	+12 38 10.35	6.244	.389	+ .01	4	18.60
6980	Brad 2145	K5	5.86	5.68	47 31.529	2.3411	+ .0032	− .0007	+29 56 31.84	6.234	.327	− .007	4	17.59
6981	CD−27° 11229		10.3		16 47 32.541	+3.7273	+ .0123	− .0014	−27 15 55.59	−6.232	+ .520	− .013	4	19.14
6982	Oelt 16569	K0	7.13	7.08	47 32.552	1.3839	+ .0076	− .0030	+53 3 13.61	6.232	.195	− .029	4	18.00
6983	BD−14° 4494	K2	8.3	8.45	47 43.073	+3.3950	+ .0084	− .0030	−14 14 9.33	6.218	+ .474	.000	4	18.21
6984	BD+69° 872	A0	7.36	7.49	47 44.07	−0.2782	+ .0360	− .0032	+69 14 11.65	6.216	− .035	+ .022	4	18.17
6985	49 Herculis	A0	6.41	7.1	48 26.212	+2.7294	+ .0039	+ .0006	+15 6 27.02	6.158	+ .381	− .007	4	17.57
6986	BD− 8° 4342	K0	9.5		16 48 46.559	+3.2574	+ .0070	− .002	− 8 15 33.02	−6.130	+ .455	.00	4	18.37
6987	Lal 30731	F5	6.87	7.29	49 8.463	2.6543	+ .0037	+ .0020	+18 11 41.63	6.099	.371	− .017	4	18.01
6988	Wi (2) 16^h 1461	K5	7.7	7.40	49 18.342	2.1604	+ .0034	+ .0035	+35 37 18.88	6.086	.302	.000	6	19.39
6989	BD−18° 4351	K2	9.0		49 20.569	3.5015	+ .0094	− .001	−18 36 44.77	6.082	.489	− .02	4	18.16
6990	BD+ 7° 3265	K2	9.50	9.4	49 27.710	2.9019	+ .0047	− .005	+ 7 38 28.08	6.073	.406	+ .03	4	18.62
6991	BD−16° 4366		9.9		16 49 28.819	+3.4446	+ .0067	− .0001	−16 16 39.71	−6.071	+ .481	− .031	4	18.24
6992	BD+48° 2448	K0	8.92	8.73	49 48.989	1.6384	+ .0056	− .004	+48 23 0.54	6.043	.230	+ .03	4	18.48
6993	BD+63° 1308	F0	8.67	8.76	49 53.19	0.5421	+ .0183	− .006	+63 16 21.55	6.037	.078	− .01	4	18.60
6994	53 Herculis	F0	5.35	5.25	49 55.947	2.2815	+ .0032	− .0075	+31 49 59.86	6.035	.320	− .023	4	19.20
6995	BD+16° 3060		9.40		49 57.834	2.7016	+ .0038	.000	+16 14 1.77	6.031	.378	− .01	4	18.64
6996	BD+67° 972		9.27	8.9	16 49 58.18	+0.0131	+ .0283	+ .0028	+67 23 10.40	−6.030	+ .005	+ .020	4	19.14
6997	BD+ 1° 3335	K0	8.7	8.26	50 2.842	3.0447	+ .0053	− .0002	+ 1 15 38.03	6.024	.426	+ .003	4	18.46
6998	BD+58° 1675	K2	9.68		50 9.644	0.9952	+ .0116	+ .001	+58 27 58.42	6.014	.140	+ .02	4	19.07
6999	ι Ophiuchi	B8	4.29	4.69	50 13.288	2.8411	+ .0043	− .0038	+10 17 46.22	6.009	.398	− .046	4	19.38
7000	BD+34° 2862		8.75	8.80	50 14.749	2.1857	+ .0033	+ .001	+34 49 36.50	6.007	.307	− .02	4	18.48
7001	BD+39° 3057		9.62		16 50 18.698	+2.0128	+ .0037	− .008	+39 44 12.52	−6.002	+ .283	− .02	4	18.90
7002	Brad 2146	K0	5.35	5.15	50 19.030	3.2073	+ .0065	− .0023	− 6 1 27.08	6.001	.449	− .029	4	19.10
7003	BD+44° 2627	A	9.16		51 30.596	1.8162	+ .0045	− .004	+44 32 4.32	5.902	.256	− .01	4	18.17
7004	BD+36° 2797		8.70	9.2	51 38.890	2.1168	+ .0035	+ .003	+36 48 32.30	5.890	.298	− .03	4	18.15
7005	BD− 0° 3203	G5	8.9	8.83	51 45.536	3.0956	+ .0056	+ .0022	− 1 1 32.74	5.881	.434	− .002	4	18.82
7006	BD+23° 3020 br.	A5	9.10	8.78	16 52 7.458	+2.5171	+ .0033	− .001	+23 29 32.74	−5.850	+ .354	+ .02	5	18.97
7007	BD+71° 812	K0	8.06	7.80	52 30.15	−0.7307	+ .0452	+ .0069	+71 24 58.33	5.819	− .099	− .057	4	18.93
7008	CD−29° 13046	A0	9.8		52 41.442	+3.7958	+ .0124	− .0015	−29 28 51.86	5.803	+ .532	− .006	4	19.15
7009	BD+46° 2237	Mb	8.2	8.02	52 41.864	1.7294	+ .0049	− .003	+46 24 8.68	5.802	.244	+ .02	4	19.04
7010	BD− 1° 3271	F8	8.1	8.29	52 44.336	3.1157	+ .0058	− .0005	− 1 55 28.97	5.799	.437	+ .031	4	18.84
7011	BD+ 6° 3318	K0	7.54	7.3	16 52 57.051	+2.9241	+ .0048	− .004	+ 6 37 33.87	−5.781	+ .408	.00	4	19.08
7012	BD+27° 2719	K0	8.57	8.35	52 57.478	2.4114	+ .0032	+ .0034	+27 19 53.24	5.780	.339	− .020	4	19.10
7013	BD−12° 4623	G5	8.2	8.27	52 59.200	3.3473	+ .0075	− .0026	−12 6 39.03	5.778	.469	+ .024	4	19.31
7014	BD+61° 1619	G0	8.20	8.01	53 7.34	0.6885	+ .0153	.000	+61 46 22.86	5.767	.098	+ .05	4	19.53
7015	BD−22° 4254	A0	9.5		53 17.324	3.6136	+ .0101	+ .0020	−22 54 18.55	5.753	.508	− .001	4	19.66
7016	BD+31° 2932	A2	8.96	8.38	16 53 18.608	+2.2984	+ .0032	+ .0001	+31 8 11.12	−5.751	+ .323	− .023	4	19.12
7017	BD−20° 4594	F5	8.8	8.73	53 43.148	3.5557	+ .0084	+ .0076	−20 39 46.09	5.717	.499	+ .020	4	19.19
7018	Wi (1) 16^h 964	G5	6.51	6.71	53 52.044	2.7532	+ .0039	− .0062	+14 0 21.20	5.704	.387	+ .064	4	19.28
7019	κ Ophiuchi	K0	3.42	3.30	53 52.831	2.8584	+ .0043	− .0199	+ 9 29 54.39	5.703	.402	− .015	94 68	19.48 19.64
7020	BD+41° 2770		9.51	9.3	[illegible]	1.9565	+ .0039	.000	+41 3 53.32	5.700	.276	+ .02	4	19.26

7006. 12^m5, $8''7$, 18°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7021	BD+20° 3355	K0	*9.48*	9.5	16 53 56.497	+2.6056	+0.0035	0.000	+20 1 15.75	−5.698	+0.365	+0.02	[illegible]	18.43
7022	BD+51° 2154	F8	*9.20*	8.7	54 2.255	1.4771	+ .0065	+ .003	+51 14 3.48	5.690	.209	− .05	4	19.65
7023	BD− 4° 4206	F8	8.0	8.5	54 5.516	+3.1673	+ .0060	− .0027	− 4 13 13.26	5.685	+ .446	− .020	4	19.71
7024	ε Urs Min	G5	4.40		54 6.77	−6.2474	+ .3215	+ .0072	+82 10 15.77	5.684	− .871	− .001	304 234	19.87 19.92
7025	BD−14° 4509	F2	6.47	6.33	54 8.462	+3.4100	+ .0079	.0000	−14 44 49.26	5.681	+ .479	− .032	[illegible]	18.54
7026	Wi (2) 16^{h} 1686	K0	6.36	6.25	16 54 23.038	+2.4884	+ .0032	+ .0023	+24 30 15.87	−5.661	+ .351	− .028	4	19.04
7027	BD− 7° 4380		10.3		54 39.588	3.2452	+ .0065	+ .001	− 7 39 31.49	5.638	.456	− .01	4	19.22
7028	BD+15° 3089	G0	6.96	6.89	55 0.610	2.7152	+ .0037	− .0014	+15 34 21.23	5.608	.383	+ .144	[illegible]	18.40
7029	CD−24° 12997	Ma	5.92	5.79	55 3.668	3.6702	+ .0105	− .0003	−24 58 18.80	5.604	.516	− .022	4	18.46
7030	BD+28° 2642	A3	*8.51*	8.53	55 10.257	+2.3806	+ .0032	+ .0035	+28 20 24.22	5.595	+ .336	+ .005	4	18.79
7031	Grmb 2406	F0	6.84	6.57	16 55 23.66	−1.8974	+ .0793	+ .0091	+75 31 8.68	−5.576	− .263	− .023	8	19.17
7032	BD−10° 4420		9.9		55 24.388	+3.3178	+ .0071	.0000	−10 48 29.89	5.575	+ .467	+ .030	4	18.95
7033	BD+49° 2569	F5	8.7	8.97	55 32.945	1.5811	+ .0057	− .004	+49 16 53.21	5.563	.224	− .04	4	18.21
7034	Brad 2169	F5	4.82	4.71	55 34.99	0.2869	+ .0211	+ .0393	+65 15 23.84	5.560	.043	+ .050	4	18.82
7035	BD+37° 2825		8.6	8.68	55 42.920	2.0801	+ .0035	− .002	+37 42 17.16	5.549	.293	− .02	4	18.80
7036	BD+ 5° 3301	A2	9.3	9.5	16 56 17.108	+2.9431	+ .0046	− .006	+ 5 45 31.16	−5.501	+ .415	+ .02	[illegible]	18.61
7037	BD+ 8° 3325	K0	*8.64*	8.34	56 27.434	2.8893	+ .0044	− .004	+ 8 7 14.46	5.487	.408	− .06	4	18.36
7038	BD+60° 1722		*9.56*		56 34.48	0.7935	+ .0133	− .003	+60 34 36.55	5.477	.114	− .04	[illegible]	18.75
7039	CD−27° 11383	A0	10.3		56 36.632	3.7340	+ .0110	+ .0002	−27 13 19.04	5.474	.528	+ .006	[illegible]	19.66
7040	Lac 7089	B8	5.06		56 42.096	3.8769	+ .0127	− .0009	−32 1 32.74	5.466	.546	− .062	[illegible]	19.94
7041	30 Ophiuchi	K0	5.00	4.64	16 56 50.385	+3.1649	+ .0058	− .0036	− 4 6 12.97	−5.455	+ .446	− .088	4	19.30
7042	BD+42° 2778	K2	*9.07*	9.20	57 1.659	1.8946	+ .0040	− .003	+42 29 18.38	5.439	.268	− .02	4 5	18.91 19.39
7043	BD− 9° 4478	A3	8.9	9.5	57 2.998	3.2909	+ .0067	+ .002	− 9 37 46.92	5.437	.464	+ .01	4	18.80
7044	Brad 2158	K0	6.37	6.77	57 10.331	3.5099	+ .0086	− .0031	−18 46 8.32	5.427	.495	− .027	4	19.26
7045	BD+10° 3117		*9.65*		57 11.620	2.8329	+ .0041	.000	+10 33 27.16	5.425	.400	+ .01	4	18.84
7046	ε Herculis	A0	3.92	4.08	16 57 13.655	+2.2984	+ .0032	− .0036	+31 2 36.41	−5.422	+ .325	+ .021	3 4	20.26 19.00
7047	BD+25° 3178	F8	8.6	8.66	57 33.286	2.4511	+ .0032	− .0003	+25 46 46.07	5.394	.346	+ .025	4	18.30
7048	BD−15° 4431		10.1		57 48.735	3.4428	+ .0079	− .0020	−16 2 13.31	5.373	.486	− .022	4	18.34
7049	BD+12° 3125	K0	*8.82*	8.59	57 50.930	+2.7827	+ .0039	− .004	+12 41 33.42	5.370	+ .392	− .02	4	18.39
7050	BD+73° 751	A5	6.24	6.10	57 51.40	−1.2050	+ .0545	− .0028	+73 14 56.47	5.369	− .167	− .030	4	18.73
7051	BD+68° 906	A0	*8.48*	8.1	16 58 8.28	−0.2511	+ .0305	+ .0046	+68 49 9.25	−5.345	− .033	− .016	[illegible]	18.07
7052	BD+63° 1316		*9.80*		58 11.79	+0.4634	+ .0175	.000	+63 43 40.53	5.340	+ .067	+ .01	4	18.39
7053	BD−12° 4646	F8	8.6	8.7	58 14.259	3.3568	+ .0071	.0000	−12 26 15.04	5.337	.474	+ .024	5	18.57
7054	BD− 5° 4393		9.3		58 21.937	3.1983	+ .0060	− .002	− 5 34 9.13	5.326	.452	− .02	4	18.45
7055	d Herculis	A2	5.27	5.07	58 39.071	2.2138	+ .0032	.0000	+33 40 59.84	5.302	.314	− .012	[illegible]	18.38
7056	BD−19° 4500	A3	8.88		16 58 43.709	+3.5411	+ .0087	+ .0016	−19 58 21.18	−5.295	+ .500	+ .032	[illegible]	18.19
7057	BD+18° 3288		*9.04*	8.9	58 46.166	2.6358	+ .0034	− .002	+18 43 33.89	5.292	.373	− .01	[illegible]	18.11
7058	BD+ 4° 3317	Ma	9.11	8.67	59 3.490	2.9630	+ .0046	− .0011	+ 4 51 40.67	5.268	.419	+ .006	[illegible]	18.04
7059	BD+53° 1911	K5	*8.86*	8.6	59 27.554	1.3282	+ .0073	− .002	+53 31 10.45	5.234	.189	− .02	4	18.01
7060	BD+ 0° 3624	A2	6.76	6.79	59 35.486	3.0735	+ .0051	− .0017	− 0 2 0.03	5.223	.435	− .021	[illegible]	18.17
7061	BD+30° 2925		*8.46*	8.80	16 59 36.974	+2.3298	+ .0031	− .0016	+29 55 57.49	−5.220	+ .330	− .012	[illegible]	18.40
7062	BD+21° 3031	K0	7.40	7.41	59 40.096	2.5599	+ .0033	− .001	+21 40 30.03	5.216	.362	.00	4	18.08
7063	CD−28° 12773	K0	9.6		16 59 44.290	3.7822	+ .0110	− .0009	−28 48 11.72	5.210	.535	− .017	[illegible]	18.38
7064	BD+64° 1166		*8.74*	8.86	17 0 43.62	0.3264	+ .0191	− .0039	+64 48 26.11	5.126	.048	+ .009	[illegible]	18.08
7065	BD+ 3° 3335	A0	*8.22*	7.80	0 54.080	2.9850	+ .0046	− .0015	+ 3 52 52.89	5.112	.422	+ .009	[illegible]	17.59
7066	BD+45° 2484		*9.69*		17 1 1.091	+1.7441	+ .0046	− .001	+45 47 37.10	−5.101	+ .248	+ .06	[illegible]	18.18
7067	BD+59° 1779	F0	*9.25*	9.4	1 7.817	0.8878	+ .0115	− .004	+59 23 33.77	5.092	.129	.00	4	18.39
7068	BD+32° 2844		*8.32*	8.30	1 8.609	2.2438	+ .0032	+ .001	+32 40 17.38	5.091	.318	− .01	4	17.86
7069	Pi 16^{h} 292 *br.*	A0	6.16	6.45	1 12.341	2.6097	+ .0034	+ .0006	+19 42 31.61	5.086	.370	− .007	4	18.03
7070	Brad 2162	A0	6.29	6.62	1 25.080	3.5808	+ .0087	− .0021	−21 27 17.36	5.068	.507	− .085	4	18.22
7071	BD+36° 2823	K2	*7.69*	7.95	17 1 27.078	+2.1032	+ .0034	+ .001	+36 51 47.03	−5.065	+ .299	− .01	4	18.43
7072	BD+ 8° 3344	K5	*8.99*	8.0	1 32.166	2.8796	+ .0042	− .003	+ 8 29 36.14	5.058	.409	− .10	4	18.25
7073	BD+22° 3068	K0	*9.05*	8.81	1 32.881	+2.5370	+ .0032	− .003	+22 30 6.48	5.057	+ .360	.00	4	18.45
7074	BD+69° 887		*9.50*		1 36.45	−0.4046	+ .0321	− .0023	+69 35 59.77	5.052	− .055	.000	[illegible]	18.84
7075	60 Herculis	A3	4.91	5.14	1 40.010	+2.7777	+ .0038	+ .0036	+12 50 59.49	5.047	+ .393	− .017	[illegible]	18.36
7076	BD+10° 3140 *br.*	A5	*8.46*	8.62	17 1 45.538	+2.8294	+ .0040	− .004	+10 39 17.71	−5.039	+ .401	− .01	4 5	18.09 18.73
7077	BD+27° 2751	K0	*9.23*	9.3	1 50.952	2.4055	+ .0031	− .0012	+27 16 59.94	5.032	.341	− .017	4	18.40
7078	Pi 16^{h} 284	A0	6.20	6.5	1 55.638	3.7151	+ .0100	− .0005	−26 24 20.77	5.025	.526	− .018	[illegible]	18.65
7079	BD − 3° 4060		9.5		2 14.272	3.1458	+ .0054	− .0019	− 3 14 0.87	4.999	.446	+ .035	4	18.17
7080	Pi 16^{h} 307	A0	6.36	6.62	2 38.679	1.8259	+ .0042	− .0008	+43 55 12.81	4.964	.260	− .014	6	19.28

7069. 10^{m}2, 2$''$0, 232°.

7076. 10^{m}1, 1$''$1, 299°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7081	Pi 16^h 310	K0	6.32	5.90	17 2 42.289	+1.5877	+0.0053	+0.0036	+48 54 49.69	−4.959	+0.227	−0.082	4	18.30
7082	BD− 1° 3292 *br.*	A2	6.38	6.63	2 43.922	3.1077	+ .0052	+ .0023	− 1 32 57.91	4.957	.441	− .038	4	17.88
7083	BD−13° 4544	F5	9.3		2 50.536	+3.3869	+ .0070	+ .0014	−13 38 6.85	4.948	+ .480	+ .008	4	18.13
7084	BD+67° 984		*8.56*	8.7	3 12.49	−0.0228	+ .0240	− .0028	+67 17 22.10	4.917	− .001	− .009	4	18.28
7085	BD+57° 1733	K0	*9.20*	8.9	3 33.729	+1.0733	+ .0092	− .003	+57 2 54.55	4.887	+ .154	+ .05	4	17.98
7086	CD−28° 12862	G5	7.9		17 3 47.873	+3.7653	+ .0103	+ .0020	−28 6 48.70	−4.866	+ .534	− .058	4	18.20
7087	BD+35° 2917	A0	7.19	7.07	3 49.464	2.1504	+ .0032	+ .003	+35 25 44.66	4.864	.306	− .01	4	18.07
7088	BD+17° 3173	G5	*8.65*	8.43	3 57.187	2.6646	+ .0034	− .009	+17 28 13.04	4.853	.379	− .02	4	18.09
7089	BD+13° 3310	F8	*9.65*		3 58.809	2.7583	+ .0036	− .003	+13 37 54.53	4.851	.392	+ .05	4	18.30
7090	BD+42° 2797		*9.04*	9.2	3 58.861	1.8882	+ .0039	− .010	+42 24 41.66	4.851	.270	− .06	4	18.30
7091	Pi 16^h 303 *m.*	A0	6.02	5.98	17 4 5.922	+3.0948	+ .0050	− .0008	− 0 58 29.81	−4.841	+ .440	− .030	4 5	18.22 17.61
7092	BD+71° 823	K	*8.52*	8.40	4 9.20	−0.6814	+ .0367	− .0069	+70 56 32.33	4.836	− .094	+ .019	4	19.14
7093	BD+77° 642	F8	*8.14*	8.00	4 19.41	−2.8890	+ .1025	− .0178	+77 43 30.98	4.822	− .407	+ .019	4	18.66
7094	BD− 7° 4400	F8	8.6	8.87	4 19.908	+3.2442	+ .0059	− .002	− 7 31 49.65	4.821	+ .461	.00	4	18.45
7095	Wi (2) 17^h 46 *br.*	K2	6.63	6.64	4 57.898	2.2832	+ .0031	+ .0004	+31 18 34.64	4.768	.324	− .020	5 4	19.29 18.82
7096	Grmb 2415	A2	6.27	6.75	17 5 9.994	+1.9592	+ .0037	− .0025	+40 37 11.76	−4.750	+ .281	− .028	4	18.87
7097	Wi (2) 17^h 48	F2	6.99	7.08	5 11.371	2.3725	+ .0031	− .0001	+28 20 21.26	4.748	.338	− .135	4	18.61
7098	CD−23° 13170	G5	8.5	8.66	5 12.276	3.6484	+ .0069	− .0008	−23 54 46.39	4.747	.519	− .029	4	18.65
7099	BD−16° 4426	K0	8.62	8.43	5 14.148	3.4502	+ .0072	.0000	−16 12 41.44	4.745	.491	− .026	5	18.09
7100	BD+24° 3127	A0	6.82	6.78	5 15.056	2.4785	+ .0031	− .0003	+24 35 23.72	4.743	.353	− .058	4	18.15
7101	BD+61° 1637		*8.64*	8.83	17 5 26.89	+0.6899	+ .0130	+ .0006	+61 24 32.43	−4.726	+ .100	+ .039	4	18.41
7102	BD−19° 4547	B8	6.86	7.08	5 32.371	3.5285	+ .0078	.0000	−19 20 9.45	4.719	.502	− .004	4	18.17
7103	BD+ 0° 3646	G5	*8.2*	8.3	5 37.966	3.0580	+ .0047	− .0003	+ 0 38 57.61	4.711	.435	− .021	4	18.31
7104	η Ophiuchi *m.*	A2	2.63	2.94	5 47.307	3.4361	+ .0070	+ .0025	−15 37 37.09	4.697	.489	+ .086	33 34	22.21 22.13
7105	BD+60° 1737		*9.25*	9.2	6 20.50	0.8075	+ .0115	− .005	+60 9 2.43	4.651	.116	+ .02	4	18.22
7106	BD−17° 4738	K2	9.5	8.8	17 6 31.463	+3.4854	+ .0074	+ .002	−17 36 36.64	−4.635	+ .496	.00	4	18.32
7107	BD+20° 3410	F5	*9.85*		6 33.436	2.5957	+ .0032	− .004	+20 8 47.05	4.632	.371	.00	4	18.32
7108	BD+26° 2963	K0	7.00	6.76	6 42.906	2.4228	+ .0031	+ .0003	+26 33 16.96	4.618	.346	− .004	4	18.06
7109	BD+38° 2891	F5	*7.59*	7.13	6 52.156	2.0421	+ .0034	− .001	+38 23 32.67	4.605	.292	+ .01	4	18.18
7110	BD+15° 3122	F5	8.39	8.3	7 19.205	2.7236	+ .0035	+ .001	+15 1 5.49	4.567	.389	+ .04	5	18.77
7111	BD+ 4° 3349	F8	6.79	6.73	17 7 25.601	+2.9637	+ .0042	− .0033	+ 4 47 16.20	−4.558	+ .423	− .012	4	18.27
7112	Wi (1) 17^h 40	G0	7.26	7.20	7 25.639	3.4098	+ .0067	− .0004	−14 31 21.12	4.558	.486	− .023	4	18.64
7113	BD+49° 2590		*8.65*	8.42	7 40.074	1.5319	+ .0053	.000	+49 48 29.67	4.537	.220	− .04	4	18.32
7114	BD+ 2° 3261	G0	*9.15*	8.57	7 44.829	3.0083	+ .0044	− .0005	+ 2 49 57.69	4.531	.430	− .021	4	18.35
7115	BD+11° 3127		*9.52*	9.2	7 47.304	2.8138	+ .0037	+ .001	+11 14 55.63	4.527	.400	+ .02	4	18.48
7116	BD−21° 4544	F0	6.85	6.79	17 7 52.175	+3.5858	+ .0060	+ .0030	−21 30 36.13	−4.520	+ .511	− .006	4	18.65
7117	BD−11° 4316	G0	9.0		7 53.302	3.3379	+ .0062	− .0003	−11 30 52.36	4.519	.476	− .017	4	18.22
7118	Wi (1) 17^h 62 *br.*	K0	6.48	6.6	7 53.693	2.8899	+ .0040	+ .0015	+ 7 59 28.29	4.518	.412	+ .012	4	18.04
7119	BD+55° 1914	K7	*9.67*		7 58.287	1.2124	+ .0075	.000	+55 0 41.00	4.512	.174	− .04	4	18.45
7120	BD− 3° 4074 *n. pr.*	F2	8.9	8.64	8 31.900	3.1628	+ .0052	− .0015	− 3 57 27.37	4.464	.451	− .014	4	18.96
7121	ζ Draconis	B5	3.22	3.37	17 8 33.06	+0.1720	+ .0190	− .0021	+65 48 47.27	−4.462	+ .026	+ .020	4	18.50
7122	BD− 4° 4247	G0	9.05	8.62	9 3.698	3.1881	+ .0052	− .0017	− 5 3 27.39	4.418	.455	− .131	4	18.76
7123	BD− 9° 4519 *br.*	A0	7.59	7.68	9 14.461	3.2840	+ .0057	− .001	− 9 11 23.29	4.403	.469	+ .03	4	18.50
7124	BD+41° 2804	K2	6.87	6.60	9 17.558	1.9060	+ .0037	− .0011	+41 49 31.51	4.398	.273	− .010	4	18.82
7125	BD+51° 2187	A0	7.03	7.31	9 24.261	1.4127	+ .0060	+ .001	+51 50 59.76	4.389	.203	.00	4	19.04
7126	BD+33° 2851		*9.54*		17 9 29.429	+2.2112	+ .0031	.000	+33 27 0.42	−4.382	+ .316	+ .01	4	18.79
7127	BD−15° 4491	K2	8.4	7.73	9 42.151	3.4348	+ .0067	− .0046	−15 31 1.14	4.364	.489	+ .028	4	18.29
7128	BD+17° 3198		*9.01*	8.9	9 47.219	2.6660	+ .0034	− .002	+17 19 6.61	4.356	.381	− .04	4	19.10
7129	CD−25° 12040	F8	9.3		9 49.200	3.7042	+ .0088	− .0040	−25 49 49.73	4.354	.529	− .080	4	19.51
7130	Wi (2) 17^h 189	K0	6.93	6.86	10 14.435	2.5580	+ .0031	+ .0001	+21 31 26.24	4.318	.366	+ .001	4	18.84
7131	BD+36° 2838		*9.61*		17 10 17.843	+2.0999	+ .0032	+ .005	+36 42 3.97	−4.313	+ .300	+ .01	4	18.45
7132	A Ophiuchi *s.*	K0	5.33	5.69	10 25.557	3.7231	+ .0088	− .0349	−26 29 12.21	4.302	.532	−1.143	4	19.94
7133	BD+58° 1707	F5	7.26	7.25	10 36.404	0.9787	+ .0091	− .0039	+58 3 37.08	4.287	.142	+ .056	4	19.10
7134	α^1 Herculis *br.*	Mb	Var.	3.33	10 59.920	2.7354	+ .0034	− .0008	+14 28 49.99	4.254	.391	+ .027	[illegible] 62	18.95 18.54
7135	BD+ 3° 3371		*9.47*	8.9	11 11.447	2.9845	+ .0041	+ .0012	+ 3 51 42.50	4.237	.427	− .005	4	19.12
7136	Wi (1) 17^h 113 *m.*	F5	7.06	6.51	17 11 17.096	+3.2964	+ .0067	+ .0012	− 9 43 7.60	−4.229	+ .472	− .018	5 4	18.32 19.09
7137	δ Herculis *br.*	A2	3.16	3.33	11 44.664	2.4652	+ .0030	− .0018	+24 55 57.65	4.190	.353	− .163	90 79	19.84 20.15
7138	Pi 17^h 61	A3	*5.47*	5.56	11 51.03	0.5115	+ .0137	+ .0015	+62 57 55.78	4.181	.075	+ .046	5	19.77
7139	Lac 7202	A3	*5.55*		11 51.293	3.9077	+ .0103	− .0077	−32 34 24.93	4.180	.550	− .055	4	19.17
7140	BD− 7° 4415	A2	9.5		11 56.260	3.2373	+ .0053	+ .002	− 7 10 31.02	4.173	.464	+ .03	4	19.08

7082. 8^m7, 2″1, 279°.
7091. 6^m1–9^m1, 0″4, 222°.
7095. 11^m1, 3″7, 219°.
7104. 3^m2–3^m7, 0″6, 238°.
7118. 9^m1, 1″4, 205°.
7120. 9^m6, 1″5, 112°.
7123. 10^m2, 1″6, 347°.
7132. 5^m3, 4″3, 1°.
7134. 3^m1 to 3^m9; 5^m4, 4″6, 112°.
7136. 7^m6–8^m1, 0″3, 331°.
7137. 8^m1, 12″, 202°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7141	BD+82° 508		*9.05*		17 12 12.83	−6.9919	+0.2730	+0.0072	+82 35 54.88	−4.150	−0.995	+0.012	4	19.77
7142	π Herculis	K5	3.36	3.7	12 15.575	+2.0911	+ .0032	− .0021	+36 53 54.97	4.145	+ .299	− .002	4	19.44
7143	CD−27° 11554	B2	7.4	7.0	12 26.561	3.7587	+ .0088	− .0007	−27 40 47.89	4.130	.538	− .013	4	18.89
7144	Wi (1) 17^{h} 143	B8	Var.	5.95	12 28.086	3.0431	+ .0044	.0000	+ 1 17 55.28	4.127	.436	− .027	4	18.94
7145	BD+29° 2971	Ko	8.7	8.40	12 28.626	2.3310	+ .0030	+ .0006	+29 33 39.36	4.127	.334	− .006	4	20.10
7146	BD+ 5° 3360	A2	*8.32*	8.29	17 12 32.448	+2.9533	+ .0041	+ .0001	+ 5 12 57.15	−4.121	+ .423	+ .009	4	19.78
7147	CD−29° 13354		9.7		12 33.942	+3.8186	+ .0093	+ .0066	−29 41 52.90	4.119	+ .546	− .012	4	18.89
7148	BD+83° 501	K2	*8.28*	8.57	12 42.98	−8.0762	+ .3355	+ .0017	+83 18 30.87	4.106	−1.150	+ .033	4	19.54
7149	BD+47° 2447		9.1	9.4	13 14.790	+1.6480	+ .0046	.000	+47 25 56.17	4.061	+ .237	.00	4	18.60
7150	BD+15° 3149	A2	*8.64*	8.4	13 25.449	2.7132	+ .0034	− .001	+15 21 28.94	4.046	.389	− .01	4	18.93
7151	BD+44° 2681	A0	8.42	8.12	17 13 53.832	+1.7703	+ .0041	− .002	+44 50 47.13	−4.005	+ .255	+ .01	4	18.41
7152	BD−22° 4318	F0	9.2		14 5.021	3.6185	+ .0075	.0000	−22 37 24.53	3.989	.518	− .026	4	18.76
7153	Wi (2) 17^{h} 329	F5	7.37	8.10	14 14.805	1.9910	+ .0034	− .0004	+39 33 3.48	3.975	.286	+ .126	4	18.54
7154	BD+50° 2380	G0	*10.05*		14 15.406	1.4650	+ .0054	+ .004	+50 49 49.55	3.974	.211	.00	4	18.74
7155	BD+56° 1963	A0	*8.72*	8.1	14 18.562	1.1186	+ .0076	+ .003	+56 9 54.49	3.970	.161	− .06	4	18.35
7156	*u* Herculis *br.*	B3	Var.	4.17	17 14 22.132	+2.2160	+ .0030	− .0016	+33 11 7.42	−3.964	+ .318	− .013	4	19.16
7157	BD+31° 2993	B5	7.20	7.28	14 25.006	2.2667	+ .0030	− .0005	+31 36 13.03	3.961	.326	− .021	4	18.63
7158	BD− 1° 3312	G5	8.4	7.96	14 31.216	3.1053	+ .0045	− .0074	− 1 25 37.75	3.952	.445	+ .039	4 5	19.11 19.39
7159	BD+49° 2614	K2	7.59	7.8	14 46.311	1.5234	+ .0051	+ .004	+49 46 34.51	3.930	.220	− .01	4	19.26
7160	Brad 2191	K5	5.28	5.07	14 51.251	2.8192	+ .0035	− .0002	+10 57 0.94	3.923	.405	− .099	4	18.39
7161	ε Herculis	A2	4.80	4.83	17 14 54.594	+2.0716	+ .0032	− .0034	+37 22 28.81	−3.918	+ .298	+ .053	4	19.54
7162	BD+12° 3191		8.7	8.74	14 54.644	2.7882	+ .0034	− .003	+12 15 0.65	3.918	.400	+ .03	4	18.54
7163	BD−19° 4599 *br.*	F5	9.9		15 8.109	3.5394	+ .0068	.000	−19 35 44.79	3.899	.508	− .03	4	19.20
7164	BD+27° 2787	K0	*7.30*	7.20	15 12.128	2.4042	+ .0029	− .0026	+27 1 15.23	3.893	.346	− .035	4	18.37
7165	BD+43° 2712	G5	*9.65*		15 13.762	1.8402	+ .0037	.000	+43 13 59.50	3.891	.265	+ .05	4	18.49
7166	Pi 17^{h} 43 *m.*	A0	6.04	6.66	17 15 13.822	+3.4904	+ .0066	− .0003	−17 40 26.11	−3.891	+ .500	− .021	4	18.24
7167	BD−11° 4344 *br.*	F2	8.5	8.6	15 24.981	3.3340	+ .0055	.0000	−11 16 12.73	3.875	.479	+ .036	4	18.55
7168	BD+23° 3082	A3	*9.35*		15 38.323	2.5118	+ .0030	− .002	+23 9 34.35	3.856	.361	.00	4	18.40
7169	BD+40° 3129		*9.49*		16 1.464	1.9457	+ .0035	+ .001	+40 40 2.32	3.823	.280	+ .05	4	18.63
7170	BD+19° 3221	K5	7.70	7.35	16 4.928	2.6096	+ .0031	.000	+19 26 42.54	3.818	.375	− .02	4	18.10
7171	BD−12° 4726	A5	8.0	7.92	17 16 30.059	+3.3758	+ .0057	− .0004	−13 0 16.88	−3.782	+ .485	− .046	4	18.37
7172	BD+53° 1932	F5	*8.80*	9.1	16 33.726	1.2850	+ .0063	.000	+53 43 0.71	3.777	.187	+ .01	4	18.51
7173	BD+33° 2874		*8.70*	8.33	16 47.587	2.2112	+ .0030	− .003	+33 16 35.08	3.757	.318	− .04	4	17.67
7174	BD+25° 3245	G5	9.2	8.88	16 47.905	2.4408	+ .0029	+ .0001	+25 42 18.86	3.756	.351	− .016	4	18.37
7175	BD+64° 1190		*8.50*	8.46	16 48.66	0.3612	+ .0143	− .0015	+64 10 3.28	3.755	.053	+ .009	4	17.97
7176	θ Ophiuchi	B3	3.37	3.79	17 17 5.692	+3.6828	+ .0076	− .0001	−24 55 15.07	−3.731	+ .530	− .031	4	17.56
7177	BD+ 1° 3422	F8	*7.91*	7.88	17 11.207	3.0352	+ .0040	− .0006	+ 1 38 6.95	3.723	.436	+ .011	4	17.72
7178	BD+17° 3225	K2	*7.63*	7.81	17 12.210	+2.6683	+ .0032	+ .001	+17 7 9.90	3.721	+ .384	.00	4	18.35
7179	Grmb 2437	K2	6.81	7.05	17 27.30	−0.9399	+ .0332	− .0030	+71 52 33.21	3.700	− .133	− .011	8	18.34
7180	BD+37° 2872		*9.50*	9.2	17 27.909	+2.0731	+ .0032	+ .002	+37 16 26.29	3.699	+ .299	.00	4	18.86
7181	BD+73° 765		*9.27*		17 17 31.56	−1.2490	+ .0389	− .0037	+73 5 41.36	−3.694	− .177	+ .004	4	19.28
7182	*w* Herculis	G0	5.36	5.77	17 39.881	+2.2336	+ .0030	+ .0101	+32 34 12.86	3.682	+ .322	−1.053	4	18.41
7183	CD−25° 12122	B9	8.3		17 50.248	3.6988	+ .0076	+ .0012	−25 28 51.17	3.667	.532	+ .004	4	19.12
7184	BD− 3° 4091	Go	8.9	8.8	17 59.690	3.1539	+ .0046	− .0043	− 3 32 3.56	3.653	.454	+ .002	4	18.84
7185	BD+ 5° 3380	K2	9.8	9.22	18 23.145	2.9368	+ .0037	− .006	+ 5 54 18.23	3.620	.423	+ .01	4	18.71
7186	BD+21° 3103	K2	7.07	7.18	17 18 36.313	+2.5620	+ .0030	− .004	+21 13 50.32	−3.601	+ .369	+ .04	4	18.21
7187	CD−27° 11627		9.3		18 48.778	3.7529	+ .0079	+ .0008	−27 21 8.68	3.583	.540	− .006	4	19.09
7188	BD+62° 1540	A2	*8.84*	8.79	18 58.36	0.5252	+ .0120	− .001	+62 41 51.07	3.569	.077	− .02	4	18.43
7189	BD+61° 1653		*8.80*	8.63	19 5.57	0.6273	+ .0110	− .007	+61 43 45.03	3.559	.092	+ .01	4	18.59
7190	BD+40° 3136	F8	5.72	5.58	19 6.004	1.9671	+ .0033	+ .0005	+40 3 9.21	3.558	.284	− .077	4	18.68
7191	BD+49° 2623		*8.99*	9.3	17 19 20.454	+1.5139	+ .0049	− .001	+49 50 25.32	−3.537	+ .218	− .02	4	18.26
7192	Pi 17^{h} 76 *br.*	K0	5.96	5.8	19 54.858	3.5876	+ .0066	− .0019	−21 22 5.06	3.488	.517	− .036	4	18.94
7193	BD− 5° 4438	G0	8.2	8.1	20 0.156	3.1937	+ .0045	+ .0014	− 5 15 7.16	3.480	.460	− .007	4	18.60
7194	BD+ 3° 3397	A2	*8.98*	8.5	20 3.156	3.0005	+ .0039	− .0003	+ 3 8 28.55	3.476	.433	− .026	4	18.58
7195	CD−23° 13373	G5	10.0		20 7.566	3.6525	+ .0070	+ .0005	−23 46 22.20	3.470	.526	− .034	4	19.31
7196	BD+ 8° 3404	K0	7.35	7.22	17 20 8.380	+2.8718	+ .0035	− .002	+ 8 40 44.06	−3.469	+ .414	− .05	4	18.99
7197	BD+69° 909		*9.12*	9.3	20 18.95	−0.4119	+ .0228	− .0040	+69 18 18.85	3.454	− .058	− .012	4	18.61
7198	BD+31° 3010		*8.76*	8.98	20 22.023	+2.2807	+ .0029	+ .0012	+31 1 55.49	3.449	+ .329	+ .006	4	18.39
7199	BD+14° 3246	A3	8.9		20 29.552	2.7324	+ .0032	− .001	+14 29 39.58	3.438	.394	+ .04	4	19.15
7200	BD−14° 4629	G5	9.9		20 31.176	3.4143	+ .0056	− .0020	−14 32 39.59	3.436	.492	− .064	4	18.71

7144. 5^{m}9 to 6^{m}5.
7156. 4^{m}8 to 5^{m}3; 10^{m}2, 4″4, 60°.

7163. 13^{m}2, 1″4, 200°.
7166. 6^{m}2–8^{m}0, 2″0, 260°.

7167. 9^{m}9, 5″6, 221°.
7192. 11^{m}8, 4″3, 142°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7201	BD+77° 656		*9.42*		17 20 33.13	−2.8983	+0.0736	+0.0034	+77 33 55.00	−3.433	−0.415	−0.002	4	19.15
7202	ρ^1 Herculis *s. f.*	A0	4.52	4.43	20 55.279	+2.0724	+ .0031	− .0032	+37 13 7.67	3.401	+ .299	− .004	5	19.49
7203	BD+35° 2965		9.3		21 1.000	2.1409	+ .0031	+ .001	+35 16 43.36	3.393	.309	− .02	4	18.37
7204	*b* Ophiuchi	F0	4.28	4.56	21 28.990	3.6622	+ .0068	− .0005	−24 6 10.57	3.353	.527	− .132	5	19.78
7205	BD−16° 4512	G0	8.4	8.59	21 34.044	3.4758	+ .0057	+ .0001	−17 0 41.18	3.346	.501	− .013	4	19.16
7206	BD+20° 3471	M0	*8.44*	6.13	17 21 47.293	+2.5933	+ .0030	− .001	+19 59 28.66	−3.326	+ .374	+ .03	4	19.22
7207	Wi (1) 17^h 319	F5	6.31	6.1	21 48.648	+3.1091	+ .0042	+ .0030	− 1 34 58.85	3.325	+ .448	+ .027	4	19.20
7208	BD+75° 624		*9.12*		21 51.88	−2.1096	+ .0523	+ .0062	+75 43 54.31	3.320	− .302	− .031	4	18.45
7209	Wi (2) 17^h 537	F2	6.69	6.78	22 6.128	+2.6834	+ .0030	− .0008	+16 27 11.24	3.300	+ .388	+ .034	4	18.81
7210	*d* Ophiuchi	F5	4.37	4.40	22 14.644	3.8276	+ .0078	+ .0014	−29 47 44.75	3.287	.551	− .156	4	19.72
7211	BD+54° 1876	A0	*8.85*	8.73	17 22 17.732	+1.2289	+ .0061	.000	+54 26 10.32	−3.283	+ .178	+ .06	4	19.29
7212	BD+45° 2531	K0	8.2	7.90	22 19.760	1.7348	+ .0038	− .001	+45 25 20.99	3.280	.251	+ .03	5 4	19.56 20.13
7213	BD+11° 3176		*9.60*		22 20.385	2.8028	+ .0032	+ .002	+11 34 20.72	3.279	.405	+ .04	4	19.89
7214	27 H Ophiuchi	F0	4.61	4.82	22 23.089	3.1885	+ .0044	− .0062	− 5 1 1.11	3.275	.460	− .049	4	20.12
7215	BD+37° 2884	K2	*8.15*	7.92	22 24.049	2.0703	+ .0031	.000	+37 14 52.45	3.274	.300	+ .03	4	19.75
7216	Lal 31741	*	5.98	5.97	17 22 27.231	+2.8953	+ .0034	+ .0007	+ 7 39 53.22	−3.269	+ .418	− .007	5 6	20.61 20.24
7217	Lal 31839	F2	7.87	7.4	22 28.118	1.4734	+ .0049	− .0024	+50 29 49.81	3.268	.213	− .066	4	19.61
7218	Pi 17^h 90	B9	5.92	5.6	22 31.439	3.8234	+ .0077	− .0009	−29 39 22.70	3.263	.551	− .028	4	18.83
7219	σ Ophiuchi	K0	4.44	4.35	22 32.640	2.9757	+ .0037	+ .0002	+ 4 12 31.95	3.262	.429	+ .003	129 106	19.74 20.05
7220	Wi (2) 17^h 589	A5	6.36	6.46	22 48.534	2.4023	+ .0028	.0000	+26 56 49.68	3.238	.347	+ .019	5	20.51
7221	BD− 7° 4444	G0	8.2	8.33	17 22 53.266	+3.2404	+ .0045	− .009	− 7 14 46.69	−3.232	+ .468	− .09	4	19.53
7222	BD−19° 4638	K0	8.8	8.8	22 59.981	3.5308	+ .0059	− .0036	−19 9 19.06	3.222	.510	− .046	4	19.65
7223	BD+24° 3184	K2	8.7	8.06	23 1.242	+2.4753	+ .0028	− .0002	+24 21 58.62	3.220	+ .857	+ .002	4	19.11
7224	BD+79° 538		*9.16*		23 28.17	−3.7157	+ .0901	+ .0035	+79 0 3.92	3.181	− .533	+ .084	4	19.43
7225	BD+43° 2734	F8	*9.84*		23 34.420	+1.8256	+ .0035	− .004	+43 23 3.55	3.172	+ .264	+ .01	4	19.32
7226	BD+38° 2937		9.1	8.9	17 24 23.137	+2.0233	+ .0031	.000	+38 28 49.84	−3.102	+ .293	− .02	4	18.44
7227	BD+32° 2923	F8	*8.46*	8.38	24 33.892	2.2201	+ .0029	+ .0011	+32 51 4.66	3.087	.321	+ .045	4	18.06
7228	*x* Herculis	A2	5.81	6.33	24 36.925	1.5893	+ .0044	.0000	+48 19 35.65	3.083	.230	− .015	4	17.91
7229	BD+12° 3224	F2	*8.70*	8.44	24 40.630	2.7736	+ .0031	− .004	+12 45 48.30	3.077	.401	+ .01	4	18.43
7230	Pi 17^h 139	A2	6.52	6.91	24 52.715	0.8990	+ .0079	− .0009	+58 43 6.08	3.060	.131	+ .012	4	18.81
7231	BD+28° 2748	K0	9.3	8.9	17 24 59.006	+2.3544	+ .0028	+ .0016	+28 32 20.99	−3.051	+ .340	− .028	4	18.71
7232	BD+65° 1183		*9.87*		25 0.75	0.1330	+ .0147	+ .0039	+65 48 19.01	3.048	.020	− .002	4	18.74
7233	BD+ 1° 3440	B9	8.19	8.38	25 8.248	3.0497	+ .0037	+ .0005	+ 0 59 54.52	3.037	.440	− .010	4	18.12
7234	BD+18° 3383	A0	8.3	8.76	25 10.077	2.6374	+ .0030	− .002	+18 14 17.69	3.035	.381	.00	4	18.20
7235	BD+56° 1984	G0	*8.82*	8.6	25 13.432	+1.0831	+ .0067	− .004	+56 25 3.46	3.030	+ .156	+ .07	3 4	17.70 18.35
7236	Grmb 2456	K2	5.91	6.02	17 25 39.59	−4.5841	+ .1101	+ .0084	+80 12 31.15	−2.992	− .659	+ .006	8	18.34
7237	BD+42° 2854	G0	8.6	8.35	25 42.013	+1.8435	+ .0035	.000	+42 55 49.13	2.989	+ .266	− .01	4	18.85
7238	BD−10° 4504	A0	10.1		25 50.408	3.3266	+ .0047	− .0005	−10 52 30.71	2.964	.481	+ .004	4	18.40
7239	BD− 8° 4448	A0	8.7	8.8	25 59.705	3.2776	+ .0045	+ .001	− 8 48 39.95	2.963	.473	+ .02	4	18.64
7240	BD−13° 4634	A0	9.9		26 12.407	3.3848	+ .0048	+ .0027	−13 17 10.33	2.945	.490	− .002	5	18.37
7241	BD−21° 4626	B9	8.6	8.4	17 26 15.962	+3.5914	+ .0059	− .0002	−21 25 27.25	−2.940	+ .519	+ .008	4	18.49
7242	BD− 2° 4375	A2	8.88	9.1	26 29.905	+3.1335	+ .0040	− .0021	− 2 37 55.07	2.920	+ .453	+ .003	4	18.23
7243	BD+81° 565		*9.07*	9.3	26 31.81	−5.7214	+ .1441	− .0013	+81 27 0.06	2.917	− .824	+ .031	4	18.69
7244	Brad 2209	A0	4.89	5.16	26 31.982	+3.6586	+ .0062	+ .0001	−23 54 7.16	2.917	+ .529	− .038	5	18.68
7245	BD+34° 2979		*9.52*		26 46.907	2.1506	+ .0029	+ .003	+34 53 19.05	2.895	.310	+ .04	4	18.39
7246	BD+22° 3157	K0	*7.76*	8.33	17 26 55.698	+2.5358	+ .0028	− .002	+22 5 44.73	−2.883	+ .368	+ .03	4	17.88
7247	BD+ 4° 3437	A2	*9.22*	8.4	27 4.386	2.9740	+ .0034	− .0005	+ 4 16 6.05	2.870	.430	+ .024	4	18.33
7248	BD+46° 2325	F5	8.7	8.00	27 16.004	1.6830	+ .0038	− .001	+46 24 50.84	2.853	.244	+ .09	4	18.77
7249	BD+15° 3201	A3	*9.13*	9.4	27 17.477	2.7120	+ .0030	.000	+15 15 8.63	2.851	.392	− .01	4	18.37
7250	BD+14° 3264		*9.47*		27 19.211	2.7386	+ .0030	− .001	+14 10 30.62	2.849	.396	.00	4	18.62
7251	λ Herculis	K0	4.48	4.08	17 27 30.233	+2.4226	+ .0028	+ .0011	+26 10 12.46	−2.833	+ .351	+ .014	4	18.08
7252	BD+ 8° 3436	G5	8.3	8.44	27 50.724	2.8790	+ .0032	− .003	+ 8 19 39.89	2.803	.417	.00	4	18.58
7253	BD+63° 1356		*9.22*		27 54.00	0.4618	+ .0105	+ .003	+63 7 22.79	2.798	.068	+ .00	4	18.93
7254	CD−29° 13606		10.4	ft.	28 1.326	3.8280	+ .0068	− .0030	−29 42 51.97	2.788	.554	− .034	4	19.10
7255	BD− 4° 4294		9.8		28 13.337	3.1734	+ .0039	+ .0002	− 4 20 53.88	2.770	.459	+ .016	4	18.79
7256	BD−14° 4677	A5	8.2	8.06	17 28 14.720	+3.4208	+ .0049	− .0001	−14 44 4.21	−2.769	+ .495	− .026	4	19.10
7257	CD−27° 11713	G0	8.7	8.4	28 19.686	3.7592	+ .0064	+ .0003	−27 24 44.34	2.761	.544	− .050	4	19.43
7258	β Draconis *br*	G0	2.99	3.35	28 37.386	1.3561	+ .0050	− .0015	+52 21 36.66	2.735	.197	+ .007	5	20.09
7259	BD+31° 3050		*9.24*	9.3	28 42.492	2.2748	+ .0028	− .0021	+31 4 39.41	2.728	.330	+ .012	4	18.72
7260	BD+40° 3162	A2	*8.57*	8.5	29 9.233	1.9993	+ .0042	+ .002	+40 1 53.63	2.690	.284	+ .02	4	18.87

7202. 5^{m}47, 470, 314°.

7216. A0, G.

7258. 14^m, 473, 12°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7261	Pulk (55) 2481	A2	5.69	5.5	17 29 13.559	+ 3.2046	+0.0040	−0.0029	− 5 41 13.23	−2.684	+0.464	−0.099	4	18.45
7262	BD+25° 3283	A2	8.3	8.68	29 14.030	2.4330	+ .0028	+ .0001	+25 46 59.99	2.683	.353	+ .038	4	19.40
7263	BD+ 5° 3419	G0	8.1	8.67	29 26.538	+ 2.9392	+ .0033	− .007	+ 5 45 20.16	2.665	+ .426	+ .05	4	19.56
7264	BD+73° 776		*9.15*	9.2	29 42.95	− 1.3638	+ .0303	− .0067	+73 22 29.86	2.641	− .196	− .022	3	18.76
7265	BD−16° 4554	B9	8.8	8.56	30 9.388	+ 3.4670	+ .0049	− .0010	−16 34 12.87	2.603	+ .503	− .020	4	18.93
7266	BD+67° 1017		*8.52*	8.68	17 30 10.75	− 0.0485	+ .0137	− .0002	+66 59 49.30	−2.601	− .006	+ .011	4 5	19.46 19.24
7267	BD−18° 4572	A2	10.1		30 14.334	+ 3.5084	+ .0050	+ .0036	−18 11 58.42	2.595	+ .509	+ .016	5 4	18.31 19.00
7268	Grw (40) 1501	B8	5.56	5.74	30 19.347	3.3348	+ .0043	− .0026	−11 11 19.69	2.588	.483	.000	5	20.62
7269	ν¹ Draconis	A5	4.98	5.38	30 35.959	1.1630	+ .0056	+ .0176	+55 14 18.71	2.564	.169	+ .049	4	19.82
7270	ν² Draconis	A5	4.95	5.23	30 41.351	1.1637	+ .0056	+ .0184	+55 13 37.24	2.557	.169	+ .052	4	19.93
7271	BD+52° 2067	K0	*8.12*	7.55	17 30 43.088	+ 1.3671	+ .0047	− .001	+52 8 57.45	−2.554	+ .199	− .01	4	19.11
7272	BD− 0° 3322	B9	9.1	8.8	30 59.211	3.0853	+ .0036	− .0009	− 0 32 42.30	2.531	.448	− .016	4	19.31
7273	α Ophiuchi	A5	2.14	2.69	31 13.192	2.7759	+ .0029	+ .0080	+12 37 2.23	2.510	.403	− .235	126 84	19.95 20.27
7274	BD+ 2° 3357	A2	9.3		31 13.644	3.0143	+ .0033	− .0020	+ 2 31 14.98	2.510	.437	− .021	4	18.92
7275	BD+29° 3054	Ma	7.71	7.40	31 16.450	2.3129	+ .0027	.0000	+29 48 57.01	2.506	.336	− .009	4	18.94
7276	BD−20° 4814	K5	8.8	8.4	17 31 36.671	+ 3.5798	+ .0051	+ .0009	−20 55 36.51	−2.477	+ .519	− .012	4	19.65
7277	BD−11° 4417	F2	9.0		31 40.522	3.3536	+ .0042	+ .0007	−11 57 31.82	2.471	.487	+ .007	4	19.20
7278	Wi (2) 17ʰ 928	A0	7.16	7.25	32 7.487	1.9212	+ .0031	+ .0006	+40 57 37.11	2.432	.279	+ .020	5	19.05
7279	Wi (1) 17ʰ 554	K5	7.04	6.24	32 7.601	2.7884	+ .0029	+ .0008	+12 5 49.99	2.432	.405	+ .018	4	18.86
7280	BD+ 4° 3456	K0	8.85	8.80	32 12.272	+ 2.9591	+ .0032	+ .0084	+ 4 53 40.43	2.425	+ .429	− .039	4	19.51
7281	f Draconis	K0	5.21	4.98	17 32 16.87	− 0.2416	+ .0153	− .0025	+68 11 9.64	−2.418	− .034	+ .137	13 12	20.09 19.72
7282	BD+36° 2898		*9.35*	9.4	32 18.874	+ 2.0893	+ .0029	+ .001	+36 32 52.93	2.416	+ .303	+ .02	4	20.45
7283	BD+47° 2502		*9.64*		32 49.581	1.6204	+ .0039	− .002	+47 34 57.34	2.371	.235	.00	4	19.42
7284	CD−24° 13405	B8	8.65	7.9	32 59.424	3.6892	+ .0054	− .0006	−24 55 4.94	2.356	.535	.000	3	18.72
7285	ξ Serpentis	A5	3.64	3.74	33 0.252	3.4370	+ .0044	− .0030	−15 20 57.59	2.356	.498	− .071	5	20.47
7286	Pi 17ʰ 156	A5	5.92	6.26	17 33 0.743	+ 3.4413	+ .0045	− .0012	−15 31 23.84	−2.355	+ .499	− .015	4	18.87
7287	BD+60° 1764	F5	*7.47*	7.66	33 7.55	0.7606	+ .0074	+ .001	+60 8 36.21	2.345	.111	− .12	3	19.17
7288	BD+16° 3229		*9.78*		33 9.348	2.6726	+ .0028	.000	+16 46 28.73	2.342	.388	+ .02	4	18.90
7289	BD− 2° 4413	G5	7.44	7.44	33 9.351	3.1383	+ .0035	+ .0017	− 2 49 38.93	2.342	.455	+ .084	3	18.79
7290	BD+14° 3289	K0	7.64	7.74	33 24.655	2.7195	+ .0028	− .001	+14 53 57.71	2.320	.394	+ .03	3	18.85
7291	BD− 8° 4471		10.0		17 33 27.226	+ 3.2681	+ .0038	+ .003	− 8 22 31.64	−2.316	+ .474	− .02	3	19.37
7292	BD+82° 524		*9.62*		33 33.75	− 6.3999	+ .1338	+ .0029	+82 1 21.33	2.307	− .926	+ .030	4	19.22
7293	Pi 17ʰ 176	A2	5.76	6.12	33 33.976	+ 2.2803	+ .0027	− .0004	+30 50 1.58	2.307	+ .331	− .013	3	19.20
7294	BD+19° 3381	A2	8.4	8.48	33 38.299	2.6058	+ .0028	− .001	+19 22 40.63	2.300	.378	+ .01	4	18.44
7295	Brad 2223	A0	5.67	5.4	34 13.271	2.4716	+ .0026	− .0017	+24 21 23.79	2.250	.359	− .003	4	18.28
7296	BD+17° 3291		*9.39*		17 34 17.937	+ 2.6518	+ .0027	+ .003	+17 35 10.15	−2.243	+ .385	+ .10	3	19.12
7297	BD+69° 928		*9.55*		34 19.69	− 0.5453	+ .0172	+ .0004	+69 50 41.11	2.241	− .078	+ .007	4 5	19.32 19.13
7298	BD− 4° 4321	K0	8.8		34 22.594	+ 3.1795	+ .0036	+ .0002	− 4 35 47.20	2.237	+ .461	− .017	3	18.62
7299	Brad 2227	K0	5.54	5.70	34 32.048	1.5646	+ .0039	+ .0023	+48 37 53.46	2.223	.228	+ .053	4	18.44
7300	BD+32° 2959		*9.29*		34 34.749	2.2316	+ .0027	+ .004	+32 20 40.81	2.219	.325	.00	3	18.63
7301	Lac 7382	B8	6.86		17 34 48.221	+ 3.9078	+ .0061	.0000	−32 9 25.31	−2.199	+ .568	− .008	5	20.67
7302	BD−22° 4387	G0	8.6	8.07	35 4.534	3.6371	+ .0049	− .002	−23 1 1.15	2.176	.528	− .03	3	18.98
7303	BD+57° 1785	K5	*9.70*		35 16.470	1.0281	+ .0058	+ .001	+56 59 6.87	2.158	.150	− .02	3	18.92
7304	BD+ 0° 3744	A0	*9.19*	8.8	35 18.046	3.0572	+ .0032	− .0016	+ 0 40 10.74	2.156	.444	− .003	3	18.44
7305	Pi 17ʰ 180	K0	6.56	6.52	35 18.584	2.9891	+ .0030	− .0122	+ 3 36 5.15	2.156	.434	− .097	3	18.36
7306	BD+21° 3175	G5	*8.13*	8.58	17 35 25.931	+ 2.5553	+ .0026	.000	+21 16 41.94	−2.145	+ .371	+ .01	5	17.93
7307	BD+26° 3053	A2	*8.45*	8.46	35 30.564	2.4082	+ .0026	+ .0020	+26 34 16.22	2.138	.350	+ .005	5	19.51
7308	Wi (2) 17ʰ 1061	K0	6.85	7.08	35 32.274	+ 2.0790	+ .0028	+ .0037	+36 47 31.26	2.136	+ .302	− .016	5	19.64
7309	BD+87° 166		*8.70*	9.3	35 56.37	−31.853	+1.808	− .018	+87 49 15.12	2.101	−4.616	+ .018	4	19.34
7310	BD−14° 4724	G5	8.8	8.13	36 20.542	+ 3.4095	+ .0041	.0000	−14 12 59.81	2.065	+ .495	− .017	3	18.30
7311	BD+ 9° 3446		*9.95*		17 36 27.523	+ 2.8453	+ .0028	+ .007	+ 9 42 30.73	−2.055	+ .413	− .06	3	19.21
7312	BD− 5° 4481	A0	8.6	8.1	36 52.068	3.2116	+ .0034	− .001	− 5 57 53.27	2.020	.467	.00	4	19.04
7313	o Serpentis	A2	4.39	4.52	36 55.029	3.3756	+ .0039	− .0048	−12 50 1.24	2.016	.490	− .056	5	19.85
7314	CD−26° 12252	F0	7.9	7.73	37 5.485	3.7445	+ .0050	.0000	−26 48 19.98	2.000	.544	− .034	4	18.55
7315	ι Herculis	B3	3.79	4.12	37 12.292	+ 1.6934	+ .0034	− .0008	+46 2 53.96	1.990	+ .247	− .002	4	18.67
7316	ω Draconis	F5	4.87	5.36	17 37 25.02	− 0.3550	+ .0138	+ .0014	+68 47 42.08	−1.972	− .051	+ .327	12	18.92
7317	BD+34° 3019	G5	*7.98*	7.90	37 31.313	+ 2.1670	+ .0027	.000	+34 15 23.06	1.963	+ .315	− .02	4	18.15
7318	BD+22° 3187	K2	*9.74*		37 36.704	2.5362	+ .0026	+ .001	+21 58 7.19	1.955	.368	+ .05	4	18.26
7319	BD+ 7° 3439		10.5		37 51.781	2.8872	+ .0029	− .002	+ 7 56 22.88	1.933	.419	+ .01	4	20.44
7320	BD− 7° 4485	F0	8.8	8.4	37 53.432	3.2604	+ .0035	.000	− 8 1 57.27	1.931	.474	+ .01	4	18.47

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7321	BD+40° 3195		*9.71*		17 38 8.460	+1.9334	+0.0029	0.000	+40 34 38.69	−1.909	+0.282	+0.04	4	19.13
7322	BD−17° 4895	A0	10.0		38 10.148	3.5027	+ .0041	+ .0020	−17 54 41.43	1.906	.510	+ .011	5	21.02
7323	BD+43° 2781	K0	6.67	6.12	38 12.233	1.8099	+ .0031	+ .0059	+43 30 33.76	1.903	.263	+ .063	4	19.58
7324	BD+10° 3269	K5	*7.46*	7.34	38 13.683	2.8220	+ .0027	− .004	+10 40 19.31	1.901	.410	− .01	5	17.91
7325	BD+28° 2803	K0	8.0	7.70	38 26.980	2.3578	+ .0025	− .0020	+28 15 7.72	1.882	.343	− .021	4	18.93
7326	BD+13° 3435		*8.90*	8.68	17 39 12.178	+2.7542	+ .0026	− .001	+13 27 37.54	−1.816	+ .401	− .02	4	18.45
7327	β Ophiuchi	K0	2.94	3.02	39 31.176	2.9656	+ .0028	− .0028	+ 4 35 58.94	1.789	.431	+ .152	109 92	19.73 20.07
7328	BD+42° 2900		*10.05*		39 41.152	+1.8558	+ .0030	+ .003	+42 26 5.87	1.774	+ .270	+ .02	4	18.73
7329	BD+71° 851		*8.92*	9.10	39 45.63	−0.8749	+ .0169	− .0306	+71 21 56.20	1.768	− .126	+ .291	4	19.41
7330	BD+65° 1205		*8.45*	8.77	39 48.47	+0.1689	+ .0093	− .0011	+65 22 21.06	1.764	+ .025	− .015	4	19.59
7331	BD+30° 3045	A0	*8.32*	8.25	17 39 56.128	+2.2919	+ .0026	− .0016	+30 23 34.74	−1.753	+ .333	+ .014	4	19.18
7332	BD+15° 3259	K2	8.44	7.76	40 1.791	2.7148	+ .0026	.000	+15 2 59.34	1.745	.395	− .01	4	18.49
7333	BD−10° 4545	F0	8.18	7.79	40 9.264	3.3147	+ .0034	+ .0008	−10 18 6.50	1.733	.482	− .013	4	19.00
7334	BD+37° 2934	F2	7.70	8.0	40 19.476	2.0472	+ .0028	+ .002	+37 36 19.02	1.719	.298	+ .01	4	18.88
7335	BD+56° 2010	K0	*8.15*	8.50	40 28.459	1.0910	+ .0049	− .005	+56 6 9.66	1.705	.159	.00	4	19.14
7336	BD− 1° 3386	K2	7.9	8.36	17 40 32.588	+3.1124	+ .0031	+ .0013	− 1 42 22.42	−1.700	+ .453	− .017	4	19.44
7337	BD+20° 3557	M0	*8.75*	8.76	40 35.272	2.5871	+ .0025	.000	+20 2 16.50	1.696	.377	− .01	4	19.71
7338	BD+51° 2246	G0	*9.40*	9.3	40 44.195	1.3901	+ .0040	+ .001	+51 38 30.77	1.683	.202	+ .04	5 6	19.21 19.07
7339	BD−20° 4865	K5	8.88	8.4	40 55.224	3.5619	+ .0039	+ .0015	−20 10 17.80	1.667	.518	− .018	4	19.20
7340	BD+ 5° 3473	A0	9.1		41 5.311	2.9432	+ .0028	− .003	+ 5 33 21.55	1.652	.428	− .01	4	19.46
7341	BD−11° 4456	K5	8.8	8.5	17 41 12.518	+3.3448	+ .0034	+ .0030	−11 32 43.87	−1.642	+ .486	+ .019	4	19.37
7342	BD− 0° 3353		9.2	9.3	41 13.239	+3.0820	+ .0029	+ .0015	− 0 23 53.36	1.641	+ .447	− .020	4	19.55
7343	BD+76° 657		*9.02*	8.9	41 14.64	−2.3682	+ .0307	+ .0033	+76 14 42.39	1.639	− .343	− .025	4	19.20
7344	BD+48° 2560		9.1	9.2	41 27.900	+1.5887	+ .0034	− .001	+48 5 22.95	1.620	+ .231	− .04	4	19.60
7345	BD+74° 726		*8.94*	8.73	41 38.82	−1.7000	+ .0230	− .0047	+74 24 20.44	1.604	− .246	− .051	4	19.15
7346	CD−28° 13580		9.7		17 42 6.897	+3.8023	+ .0045	+ .0030	−28 42 27.97	−1.563	+ .554	− .038	4	19.19
7347	X Sagittarii	F8	Var	4.64	42 31.378	3.7753	+ .0043	− .0004	−27 48 5.20	1.527	.550	− .022	4	18.98
7348	BD− 6° 4648	G5	8.2	7.87	42 40.897	3.2169	+ .0030	− .008	− 6 10 38.74	1.513	.469	− .14	4	18.47
7349	Lal 32424	K0	6.24	6.29	42 55.558	3.6233	+ .0039	− .0015	−22 26 57.08	1.492	.528	− .014	4	18.70
7350	BD+50° 2457	F8	7.27	7.25	42 56.884	1.4802	+ .0036	+ .001	+50 4 32.76	1.490	.215	− .04	4	18.49
7351	Wi (1) 17^{h} 780	B9	6.07	6.43	17 43 2.932	+3.4223	+ .0034	− .0013	−14 41 48.99	−1.481	+ .498	− .010	4	18.58
7352	BD+23° 3178	G0	9.3		43 7.610	2.4903	+ .0024	− .001	+23 36 21.86	1.475	.363	+ .05	4	18.23
7353	μ Herculis	G5	3.48	3.52	43 19.594	+2.3710	+ .0025	− .0243	+27 46 0.06	1.457	+ .345	− .751	138 111	19.80 19.98
7354	ψ¹ Draconis ... *br.*	F5	4.90	4.88	43 21.46	−1.0757	+ .0160	+ .0036	+72 11 18.83	1.454	− .156	− .267	8	18.57
7355	Pi 17^{h} 223	B3	6.16	6.19	43 27.623	+3.7503	+ .0041	− .0011	−26 56 51.55	1.445	+ .546	− .020	[illegible]	19.92
7356	BD+60° 1780		*8.50*	8.04	17 43 30.05	+0.7067	+ .0059	− .001	+60 36 20.73	−1.442	+ .103	− .04	4	18.50
7357	Pulk (55) 2509 ... *m.*	A0	5.58	5.49	43 36.130	2.6467	+ .0025	− .0008	+17 43 32.76	1.433	.385	− .027	4	18.90
7358	BD+11° 3259		*9.14*	8.96	43 37.889	2.8027	+ .0025	− .001	+11 27 4.72	1.430	.408	+ .03	5	18.21
7359	γ Ophiuchi	A0	3.74	3.75	43 52.832	3.0090	+ .0027	− .0018	+ 2 44 10.79	1.409	.438	− .079	5	20.05
7360	BD+ 7° 3467	G5	9.1	8.9	44 26.896	2.9040	+ .0026	− .014	+ 7 12 44.54	1.359	.423	− .22	4	18.65
7361	BD+34° 3049	A2	7.83	8.25	17 44 54.076	+2.1408	+ .0026	+ .004	+34 56 59.01	−1.320	+ .312	.00	4	18.75
7362	BD− 4° 4355		10.0		44 55.394	3.1699	+ .0028	+ .0017	− 4 10 7.79	1.318	.462	+ .017	4	17.70
7363	BD−16° 4624	A0	9.5		45 6.303	3.4586	+ .0033	.0000	−16 8 18.07	1.302	.503	− .007	4	18.71
7364	BD− 7° 4508	K0	8.2	8.97	45 6.902	+3.2544	+ .0029	− .003	− 7 45 32.06	1.301	+ .474	− .06	4	17.94
7365	BD+67° 1035		*8.54*	8.64	45 7.35	−0.1355	+ .0092	− .0016	+67 25 46.31	1.301	− .019	− .054	4	18.18
7366	BD+16° 3285		*7.97*	8.14	17 45 12.336	+2.6741	+ .0025	+ .001	+16 38 30.25	−1.293	+ .390	+ .02	4	18.75
7367	BD+18° 3473		*8.86*	8.0	45 33.646	2.6278	+ .0025	− .002	+18 26 52.54	1.262	.383	− .06	4	18.17
7368	87 Herculis	K0	5.34	5.30	45 34.459	2.4323	+ .0025	− .0008	+25 38 54.75	1.261	.355	− .045	4	18.12
7369	BD+29° 3121	F8	*8.97*	9.3	45 37.007	2.3269	+ .0025	+ .0031	+29 12 45.45	1.257	.339	− .040	4	18.11
7370	BD+58° 1755	K2	*8.60*	8.4	45 40.846	0.8821	+ .0048	+ .003	+58 39 55.20	1.252	.129	− .01	4	18.39
7371	CD−24° 13541		10.4	ft.	17 46 6.988	+3.6874	+ .0036	− .0044	−24 44 32.25	−1.214	+ .536	− .076	4 5	18.80 18.71
7372	BD+44° 2773	G0	8.27	8.35	46 17.448	1.7455	+ .0030	.000	+44 51 20.09	1.198	.254	.00	4	18.14
7373	BD+ 8° 3506	G0	9.5		46 20.690	2.8793	+ .0025	− .002	+ 8 14 50.98	1.194	.419	+ .14	4	18.15
7374	Lal 32601	K5	6.79	6.64	46 22.031	2.8406	+ .0025	− .0016	+ 9 52 19.34	1.192	.414	− .045	4	17.71
7375	BD+21° 3228	F8	*8.57*	8.38	46 25.000	2.5498	+ .0024	− .003	+21 24 19.31	1.187	.372	.00	4	19.17
7376	BD+ 2° 3411	A0	*9.25*	9.3	17 46 29.488	+3.0238	+ .0026	− .0006	+ 2 6 6.72	−1.181	+ .441	.000	4	19.18
7377	BD+57° 1806	G5	*9.65*	8.6	46 36.450	1.0076	+ .0044	+ .004	+57 8 15.38	1.171	.147	− .09	4	18.49
7378	CD−29° 14095	Ma	10.4		46 59.649	3.8310	+ .0038	− .0008	−29 36 42.28	1.137	.557	− .093	4	19.42
7379	BD+33° 2965		*9.46*		47 1.106	+2.1897	+ .0025	+ .004	+33 29 46.98	1.135	+ .319	.00	4	18.58
7380	BD+72° 808		*8.44*	8.6	47 2.64	−1.0381	+ .0131	+ .0006	+72 1 6.51	1.133	− .151	+ .048	4	18.21

7347. 4^{m}4 to 5^{m}0.

7354. 6^{m}07, 30″, 15°.

7357. 5^{m}7–7^{m}7, 0″7, 289°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7381	BD−20° 4895	A0	7.93	8.61	17 47 24.833	+ 3.5599	+0.0032	−0.0001	−20 3 31.32	−1.100	+0.518	−0.014	4	18.25
7382	BD+26° 3091	K0	*9.18*		47 32.773	2.4078	+ .0024	+ .0027	+26 29 11.80	1.089	.351	− .005	4	17.89
7383	BD− 9° 4616	A3	8.91	8.3	47 36.105	3.3070	+ .0028	− .0004	− 9 57 29.19	1.084	.482	− .004	4	18.29
7384	BD−18° 4666	A5	7.49	7.02	47 42.731	3.5081	+ .0030	+ .0005	−18 4 15.40	1.074	.511	+ .013	4	18.30
7385	Lal 32633	K0	6.45	6.44	47 51.254	3.1011	+ .0026	− .0011	− 1 13 2.20	1.062	.452	− .015	4	17.77
7386	BD+39° 3241	G0	8.42	7.8	17 47 56.404	+ 1.9709	+ .0027	+ .001	+39 32 40.00	−1.054	+ .287	+ .07	4	18.03
7387	*z* Herculis	B8	6.43	6.70	47 57.673	1.5688	+ .0031	− .0003	+48 24 54.83	1.053	.229	+ .008	4	19.01
7388	BD+13° 3472	G5	8.5	7.96	48 12.942	2.7505	+ .0024	− .004	+13 34 21.19	1.030	.401	− .03	4	18.13
7389	BD+62° 1573	F2	6.69	6.74	48 26.60	+ 0.4736	+ .0057	− .011	+62 49 8.60	1.010	+ .069	+ .03	4	17.77
7390	Schwerd 1059	Ma	7.10	7.24	48 30.03	− 4.7442	+ .0414	− .0049	+80 18 38.72	1.005	− .690	.000	8	18.23
7391	Lac 7478 *m.*	B9	6.08		17 48 34.692	+ 3.9981	+ .0038	+ .0007	−34 44 8.15	− .999	+ .583	− .001	5	20.17
7392	BD+54° 1917	G0	*8.45*	8.58	48 42.359	1.1843	+ .0037	+ .004	+54 44 52.24	.987	.173	+ .01	4	17.99
7393	Brad 2245	K0	6.06	5.92	49 28.459	1.9526	+ .0027	− .0011	+39 59 55.50	.920	.285	+ .049	4	18.69
7394	BD+27° 2908	K7	9.2	8.6	49 39.788	2.3758	+ .0024	− .0021	+27 33 54.80	.904	.346	+ .001	4	17.72
7395	BD− 3° 4199	K2	8.8	8.3	49 43.874	3.1451	+ .0025	− .0009	− 3 6 7.11	.898	.458	− .027	4	18.02
7396	BD+ 0° 3805	K0	*8.59*	8.56	17 50 0.625	+ 3.0560	+ .0024	+ .0019	+ 0 42 55.66	− .873	+ .446	− .032	4	17.68
7397	BD+46° 2383		*8.91*	8.98	50 17.274	1.6848	+ .0029	− .002	+46 6 37.85	.849	.245	.00	4	17.94
7398	BD+ 3° 3525	A2	*9.35*	9.4	50 20.304	2.9915	+ .0024	− .0024	+ 3 28 48.10	.845	.436	− .016	4	17.88
7399	Wi (1) 17^h 951	G5	6.87	6.98	50 37.547	3.2537	+ .0025	− .0040	− 7 43 7.18	.820	.474	− .048	4	17.95
7400	BD−12° 4870	A2	8.8	9.2	50 42.538	3.3579	+ .0026	+ .0010	−12 3 18.10	.812	.489	+ .024	4	18.38
7401	BD−22° 4459	A0	10.0	ft.	17 50 49.714	+ 3.6234	+ .0028	− .0010	−22 24 41.32	− .802	+ .529	− .003	4	18.46
7402	BD+85° 289		*9.54*		51 12.76	−14.158	+ .161	+ .016	+85 34 7.90	.768	−2.062	+ .008	5	19.86
7403	BD−15° 4721	A0	9.8		51 13.318	+ 3.4477	+ .0026	− .0002	−15 41 2.62	.768	+ .503	− .015	4	18.30
7404	BD+44° 2789	A0	*8.85*	9.13	51 35.892	1.7750	+ .0027	− .002	+44 10 43.15	.735	.259	− .01	4	18.63
7405	BD+52° 2110	F2	*8.50*	8.01	51 40.214	1.3386	+ .0032	+ .004	+52 23 59.87	.728	.195	− .01	5 4	17.99 18.35
7406	BD+30° 3083	K7	*9.22*	9.3	17 51 45.641	+ 2.3007	+ .0024	+ .0004	+30 1 46.43	− .720	+ .335	− .023	4	18.26
7407	BD+38° 3032	G0	*8.6*	8.03	51 49.783	+ 2.0116	+ .0025	.000	+38 28 7.22	.715	+ .293	+ .05	4	18.64
7408	BD+78° 612	G	*8.42*	8.3	51 56.65	− 3.4378	+ .0217	− .0342	+78 24 27.19	.704	− .500	+ .173	4	18.62
7409	BD−13° 4792	A0	9.5		51 57.874	+ 3.3916	+ .0025	.0000	−13 25 50.94	.703	+ .494	.000	4	18.27
7410	*ξ* Draconis	K0	3.90	3.98	52 8.630	1.0251	+ .0037	+ .0119	+56 53 5.31	.687	.149	+ .075	4	18.46
7411	89 Herculis	F5	5.48	5.58	17 52 11.453	+ 2.4195	+ .0023	+ .0001	+26 3 43.07	− .683	+ .353	+ .002	5	17.97
7412	CD−23° 13678	K5	6.85	6.51	52 14.101	3.6654	+ .0027	+ .0002	−23 55 44.53	.679	.535	− .001	4	18.48
7413	Pulk (55) 2527	K2	5.69	5.75	52 29.110	2.5201	+ .0023	.0000	+22 28 32.11	.657	.367	− .002	4	18.90
7414	BD+ 5° 3546		9.7		52 33.622	2.9544	+ .0023	− .0059	+ 5 3 41.63	.651	.431	+ .011	4	18.76
7415	CD−26° 12580		9.5		52 34.458	3.7502	+ .0027	+ .0016	−26 53 39.95	.649	.547	− .024	4	19.42
7416	BD+55° 1994	G	*10.18*		17 52 59.062	+ 1.0986	+ .0035	− .008	+55 54 59.89	− .614	+ .160	+ .04	4	19.39
7417	35 Draconis	F5	5.04	5.25	53 1.62	− 2.7011	+ .0156	+ .0133	+76 58 27.42	.610	− .393	+ .239	8	19.00
7418	BD+16° 3319		*9.38*		53 19.600	+ 2.6870	+ .0022	− .001	+16 6 29.82	.584	+ .392	− .01	4	18.28
7419	BD+13° 3492	A2	*8.00*	8.1	53 25.394	2.7401	+ .0022	− .001	+13 59 2.62	.575	.399	+ .01	4	18.88
7420	*θ* Herculis	K0	3.99	4.07	53 30.488	2.0566	+ .0025	+ .0003	+37 15 37.17	.568	.300	+ .004	5	20.35
7421	BD+46° 2391		8.4	8.7	17 53 43.804	+ 1.6420	+ .0027	+ .003	+46 57 52.25	− .548	+ .239	− .01	4 5	18.67 18.61
7422	BD+20° 3612	K2	*9.20*	8.65	53 48.948	2.5655	+ .0023	.000	+20 47 34.27	.541	.374	− .01	4	19.19
7423	Oelt 17675	F0	6.10	6.43	53 55.680	1.0938	+ .0034	+ .0042	+55 58 44.02	.531	.159	+ .113	4	18.27
7424	Lal 32965	Ko	6.78	6.83	54 28.754	2.1915	+ .0024	+ .0009	+33 24 32.73	.483	.319	− .028	4	19.33
7425	BD− 5° 4542	K2	7.62	7.34	54 29.832	3.1994	+ .0022	− .0018	− 5 25 4.25	.481	.466	− .024	4	18.84
7426	BD−19° 4784	G0	8.8	8.71	17 54 32.026	+ 3.5467	+ .0023	− .0050	−19 32 1.71	− .478	+ .517	− .068	4 5	18.81 18.73
7427	*ν* Ophiuchi	K0	3.50	3.53	54 37.299	3.3026	+ .0022	− .0008	− 9 45 53.74	.470	.481	− .118	125 91	19.94 20.15
7428	*ξ* Herculis	K0	3.82	3.82	54 39.311	2.3243	+ .0023	+ .0066	+29 15 20.84	.467	.339	− .027	4	19.64
7429	Wi (1) 17^h 1071	A0	7.29	7.18	54 42.195	2.7268	+ .0022	+ .0001	+14 31 3.97	.463	.397	− .037	4	19.63
7430	*γ* Draconis	K5	2.42	2.7	54 44.868	1.3933	+ .0029	− .0009	+51 29 51.99	.459	.203	− .026	4	19.97
7431	BD+ 9° 3526	G0	9.1		17 55 1.422	+ 2.8536	+ .0021	+ .001	+ 9 18 45.68	− .435	+ .416	+ .03	4	19.36
7432	BD+41° 2939		9.3	8.6	55 6.426	1.9020	+ .0025	.000	+41 13 33.97	.428	.277	+ .04	4	18.76
7433	CD−27° 12237	B9	9.5		55 29.160	3.7747	+ .0023	+ .0020	−27 43 6.57	.395	.553	− .023	4	19.31
7434	BD+ 6° 3589	F0	7.07	7.24	55 33.100	2.9223	+ .0021	− .001	+ 6 25 26.85	.389	.426	+ .02	4	19.60
7435	Rad (45) 3808	K0	7.22	7.46	55 41.10	0.4934	+ .0039	− .0088	+62 36 56.09	.377	.072	+ .097	4	19.20
7436	BD− 1° 3431	B9	8.7	8.39	17 55 45.864	+ 3.0998	+ .0021	+ .0015	− 1 9 41.60	− .371	+ .452	− .019	4	18.95
7437	BD−11° 4510	A5	8.7	8.6	55 52.714	3.3386	+ .0021	+ .0019	−11 15 21.30	.361	.487	.000	4	18.26
7438	BD− 9° 4637	F8	9.3	9.2	55 56.714	3.2965	+ .0021	− .001	− 9 30 30.46	.355	.481	− .02	5	20.35
7439	Oelt 17707 *br.*	A2	7.87	7.66	56 17.295	1.3486	+ .0029	+ .0007	+52 13 27.13	.325	.197	− .025	5 4	19.17 18.78
7440	Brad 2257	B3	4.81	5.28	56 18.022	2.9705	+ .0021	− .0005	+ 4 22 20.07	.324	.433	− .017	5	19.57

7391. $6^{m}4$–$7^{m}6$, $0''.3$, 89°.

7439. $9^{m}8$, $9''.3$, 262°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7441	BD+23° 3236	G5	*9.56*		17 56 35.300	+ 2.4912	+0.0022	0.000	+23 31 1.82	−0.298	+0.363	+0.04	[illegible]	19.20
7442	67 Ophiuchi br.	B5	3.95	4.20	56 38.280	3.0042	+ .0021	+ .0001	+ 2 56 3.93	.294	.438	− .014	5	19.34
7443	BD+36° 2989		*9.49*	9.1	56 42.665	2.0987	+ .0024	+ .002	+36 5 23.80	.288	.306	− .03	5	20.26
7444	Brad 2253	K2	6.31	6.66	56 44.190	+ 3.4852	+ .0020	.0000	−17 9 17.73	.285	+ .509	− .012	5	19.78
7445	BD+77° 675		*9.35*	8.91	56 55.93	− 2.9019	+ .0098	− .0015	+77 23 35.69	.269	− .423	+ .017	5 6	20.25 19.94
7446	BD+49° 2716	K5	8.2	7.88	17 56 58.106	+ 1.5211	+ .0027	+ .0006	+49 15 53.37	− .265	+ .222	− .005	4	18.42
7447	BD+ 7° 3527	G5	9.1		57 16.040	2.8935	+ .0020	− .003	+ 7 38 16.04	.239	.422	− .05	4	18.39
7448	BD+25° 3402	F5	9.1		57 23.645	2.4236	+ .0022	+ .0005	+25 54 36.52	.228	.353	+ .013	5	18.63
7449	BD+18° 3525		*9.47*		57 23.673	2.6387	+ .0022	+ .002	+17 59 32.74	.228	.384	.00	4	19.20
7450	BD−13° 4833	A3	8.7	8.4	57 25.700	3.3848	+ .0019	.0000	−13 8 47.34	.225	.493	+ .005	4	18.29
7451	BD+29° 3165	G5	7.16	7.37	17 57 34.463	+ 2.3145	+ .0023	− .0090	+29 34 10.84	− .212	+ .337	+ .163	4	18.00
7452	BD+13° 3503		*9.38*	9.1	57 37.774	+ 2.7607	+ .0021	+ .002	+13 8 33.59	.207	+ .403	+ .03	4	19.22
7453	BD+70° 967		*8.82*	8.0	57 38.21	− 0.6162	+ .0048	+ .0025	+70 5 14.44	.207	− .090	− .020	4	18.71
7454	BD− 3° 4223	F8	9.8		57 50.338	+ 3.1618	+ .0020	+ .0008	− 3 48 53.24	.189	+ .461	+ .023	4	19.50
7455	BD−21° 4826	A0	8.2	7.2	57 51.125	+ 3.5993	+ .0019	.0000	−21 30 32.81	.188	+ .525	− .004	4	18.78
7456	δ Urs Min	A0	4.44		17 58 2.69	−19.514	+ .072	+ .019	+86 36 50.98	− .171	−2.845	+ .049	246 184	18.83 18.88
7457	BD+53° 2011 s. f.	G0	*9.50*		58 16.348	+ 1.2817	+ .0028	.000	+53 16 22.84	.151	+ .187	+ .02	4	18.86
7458	BD+63° 1396	K5	*7.82*	7.79	58 35.81	0.3377	+ .0034	− .0009	+63 57 36.27	.123	.049	.000	4	17.91
7459	BD+35° 3129	A5	9.17	8.7	58 42.992	2.1355	+ .0023	+ .003	+35 2 41.27	.112	.311	− .03	5 4	19.06 18.25
7460	τ Ophiuchi m.	F0	4.88	5.61	58 43.579	3.2648	+ .0019	+ .0014	− 8 10 52.76	.112	.476	− .040	4	18.74
7461	BD+48° 2621	K2	7.06	6.98	17 58 58.297	+ 1.5641	+ .0026	− .001	+48 27 54.99	− .089	+ .228	+ .02	4	18.02
7462	BD+10° 3373	K2	*8.17*	7.94	59 43.354	2.8300	+ .0020	− .004	+10 17 37.56	.024	.413	.00	4	18.01
7463	CD−25° 12664	BJ	10.7	ft.	59 44.575	3.7016	+ .0017	+ .0002	−25 12 13.32	.023	.540	− .011	4	18.49
7464	BD+ 1° 3574	G5	*8.19*	7.90	59 58.842	+ 3.0300	+ .0019	+ .0068	+ 1 49 45.02	.002	+ .442	− .046	4	18.25
7465	BD+68° 970		*9.00*	9.2	17 59 59.27	− 0.3806	+ .0033	+ .0017	+68 50 40.92	− .001	− .055	+ .009	4	18.26
7466	Grmb 2500 m.	F2	7.22	7.28	18 0 9.287	+ 1.7717	+ .0024	− .0050	+44 13 57.80	+ .014	+ .258	− .057	4	18.24
7467	BD−15° 4806	K0	9.51	8.8	0 11.853	+ 3.4312	+ .0017	− .0001	−15 0 56.94	.017	+ .500	− .004	4	17.97
7468	24 Urs Min	A3	5.86	6.19	0 21.40	−22.391	.000	+ .068	+86 59 44.94	.031	−3.264	+ .008	8	19.14
7469	BD+54° 1933	K0	*9.18*	8.9	0 23.527	+ 1.2180	+ .0026	+ .004	+54 13 35.84	.034	+ .178	− .08	4	19.21
7470	BD+32° 3038		*8.46*	8.43	0 34.727	2.2127	+ .0022	+ .002	+32 45 50.74	.051	.322	− .03	4	18.51
7471	CD−23° 13881	B3	8.3	7.70	18 0 36.469	+ 3.6599	+ .0015	+ .0015	−23 43 17.21	+ .053	+ .534	+ .004	4	19.17
7472	γ Sagittarii	K0	3.07	3.36	0 40.127	3.8576	+ .0014	− .0046	−30 25 34.26	.058	.563	− .194	5	19.34
7473	BD−17° 5011	A2	9.8		0 46.239	3.4889	+ .0016	− .0024	−17 17 48.28	.068	.509	− .006	4	18.48
7474	BD+45° 2649	G	8.6	8.52	1 8.006	+ 1.6903	+ .0024	− .011	+45 58 17.34	.099	+ .246	.00	6 5	17.83 18.67
7475	BD+72° 820		*9.20*		1 11.34	− 1.1388	+ .0027	+ .0046	+72 23 43.70	.104	− .166	+ .026	4	19.36
7476	BD+27° 2946	K0	*8.27*	8.30	18 1 19.017	+ 2.3641	+ .0022	+ .0023	+27 56 10.44	+ .115	+ .344	− .049	4	19.13
7477	BD− 5° 4567	A0	8.9		1 23.863	3.2042	+ .0017	.000	− 5 37 12.37	.122	.467	.00	4	18.79
7478	70 Ophiuchi br.	K0	4.28	4.62	1 24.598	3.0139	+ .0018	+ .0171	+ 2 31 5.30	.123	.439	−1.102	5	18.35
7479	Wi (2) 17ʰ 1913	A0	7.46	7.44	1 28.991	1.9721	+ .0023	+ .0016	+39 28 32.43	.130	.287	− .023	5	19.58
7480	BD+20° 3657	G0	*8.49*	8.38	1 37.747	2.5848	+ .0021	− .002	+20 3 32.82	.142	.377	.00	4	19.40
7481	BD+57° 1835	K5	*9.15*	8.7	18 1 40.438	+ 1.0075	+ .0025	− .006	+57 5 39.07	+ .146	+ .147	− .02	4	19.25
7482	BD+22° 3267	F2	7.30	7.4	1 41.089	2.5080	+ .0021	− .002	+22 54 28.19	.147	.365	.00	4	18.77
7483	Pi 17ʰ 356	B1	6.22	6.29	2 23.427	3.5978	+ .0013	− .0010	−21 27 11.64	.209	.525	+ .003	5	20.38
7484	BD+50° 2520 n.	F8	*9.48*		2 39.119	1.4301	+ .0024	+ .002	+50 52 18.78	.233	.208	+ .05	4	19.51
7485	BD+ 4° 3602	K2	*9.47*	9.3	2 52.350	2.9791	+ .0018	− .0007	+ 4 0 34.00	.251	.434	− .040	5	18.30
7486	Pi 17ʰ 359	K0	4.66	5.25	18 3 0.972	+ 3.7972	+ .0011	+ .0013	−28 28 1.88	+ .264	+ .553	− .033	4	19.10
7487	BD− 7° 4561		9.9		3 1.432	3.2463	+ .0017	+ .005	− 7 24 13.38	.265	.473	+ .02	4	18.79
7488	BD− 9° 4652	B9	7.74	7.9	3 10.510	3.2889	+ .0016	+ .003	− 9 11 18.54	.278	.480	.00	4	19.42
7489	BD+35° 3151		*9.28*	9.2	3 12.834	2.1218	+ .0022	+ .003	+35 26 14.90	.281	.309	+ .02	4	19.44
7490	BD+41° 2975	K0	*7.80*	7.86	3 31.389	1.8952	+ .0022	− .002	+41 23 20.96	.308	.276	+ .01	4 5	19.44 19.22
7491	72 Ophiuchi	A3	3.73	3.90	18 3 33.370	+ 2.8479	+ .0018	− .0042	+ 9 33 5.32	+ .311	+ .415	+ .082	126 99	20.03 20.21
7492	BD+12° 3391		9.0	8.8	3 40.894	2.7841	+ .0019	− .001	+12 11 24.78	.322	.406	+ .03	4	18.48
7493	Wi (2) 17ʰ 1951	K0	6.78	6.89	3 45.757	2.6920	+ .0019	+ .0001	+15 54 32.17	.329	.392	− .169	4	19.45
7494	BD− 0° 3421	G5	8.3	7.98	3 51.664	3.0013	+ .0016	− .0002	− 0 47 56.80	.338	.450	− .030	4	19.15
7495	BD−19° 4863	B9	8.33	8.25	4 20.044	3.5561	+ .0012	− .0010	−19 53 17.45	.379	.519	+ .003	4	19.83
7496	BD+ 0° 3857	F5	9.33	9.4	18 4 21.344	+ 3.0703	+ .0016	− .0010	+ 0 6 6.66	+ .381	+ .448	− .046	4	19.61
7497	o Herculis	A0	3.83	4.4	4 25.255	+ 2.3397	+ .0021	+ .0002	+28 45 2.33	.387	+ .341	+ .002	4	18.94
7498	BD+67° 1047		8.38	8.87	4 27.47	− 0.1392	+ .0015	+ .0040	+67 24 48.11	.390	− .020	− .002	4	19.07
7499	Wi (1) 17ʰ 1302	G5	6.85	6.89	4 27.771	+ 3.1409	+ .0016	+ .0011	2 55 12.70	.390	+ .458	− .006	4	19.38
7500	Brad 2279 s.	A3	5.92	6.03	4 35.941	2.4186	+ .0021	− .0002	+26 5 4.22	.402	.353	+ .028	4	20.33

7442. 15m, 6".5, 196°.
7457. 10m.3, 4".5, 440°.
7460. 5m.3-6m.0, 2".0, 262°.

7466. 7m.3 9m.8, 0".9, 119°.
7478. 5m.0-8m, 1".5, 134°, 88 yrs.; for c. g. add +0.000, −1".35 (1918.35); p. m. is for c. g.
7484. 9m.6, 13".?, 182°.

7500. 6m.0, 14", 2°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7501	CD−23° 14002		10.9	ft.	18 4 58.941	+3.6572	+0.0010	−0.0125	−23 37 43.20	+0.436	+0.533	−0.093	5	18.53
7502	Grmb 2518 *br.*	A0	6.35	6.5	5 6.404	1.4974	+ .0022	− .0003	+49 41 53.15	.447	.218	+ .018	4	18.49
7503	BD− 4° 4407	K2	8.7	8.5	5 6.736	3.1800	+ .0014	− .0040	− 4 35 21.17	.447	.463	− .105	4	17.96
7504	BD−10° 4619	G5	8.7	8.3	5 6.952	3.3284	+ .0013	− .0007	−10 50 8.79	.448	.485	+ .042	4	18.30
7505	Rad (90) 4744	K0	6.50	6.67	5 10.834	3.4045	+ .0012	+ .0004	−13 56 55.90	.453	.496	− .006	[illegible]	18.28
7506	BD+ 7° 3565	A0	9.7		18 5 11.291	+2.8878	+ .0017	−. 003	+ 7 52 54.57	+ .454	+ .420	+ .01	4	18.10
7507	Wi (1) 18^{h} 29	K0	7.13	6.97	5 49.039	+2.9278	+ .0017	−. 0030	+ 6 11 26.76	.509	+ .426	+ .034	4	18.06
7508	40 Draconis *s. pr.*	F5	6.18	5.92	6 1.98	−4.4971	− .0126	+ .0196	+79 59 30.60	.528	− .656	+ .123	10	19.54
7509	Brad 2321 *n. f.*	F5	5.80	5.75	6 8.07	−4.4997	− .0129	+ .0167	+79 59 42.65	.536	− .656	+ .114	10	19.39
7510	BD+29° 3190	G0	7.01	6.90	6 16.528	+2.3035	+ .0020	+ .0064	+29 56 6.30	.549	+ .335	+ .075	4	18.06
7511	CD−29° 14623	A0	9.12		18 6 36.937	+3.8400	+ .0004	− .0026	−29 52 25.18	+ .579	+ .560	− .042	4	19.17
7512	BD+24° 3351	K0	*8.06*	7.90	6 37.374	2.4737	+ .0019	+ .0016	+24 9 9.10	.579	.360	.000	4	18.18
7513	BD+ 1° 3612	K2	*7.83*	7.83	7 9.964	3.0269	+ .0015	− .0016	+ 1 57 53.01	.627	.441	− .035	4	18.52
7514	BD+21° 3328	B9	*7.86*	7.78	7 12.452	2.5597	+ .0019	− .002	+21 0 37.98	.631	.372	+ .01	5	18.22
7515	BD+55° 2033	F0	*8.87*	8.85	7 28.442	+1.1402	+ .0020	.000	+55 21 1.82	.653	+. 165	− .02	4	18.30
7516	BD+74° 750		*9.88*		18 7 28.98	−1.8359	− .0043	+ .0035	+74 46 41.68	+ .654	− .268	− .013	[illegible]	18.43
7517	BD−15° 4859	K0	9.7		7 30.515	+3.4382	+ .0009	+ .0015	−15 18 19.14	.657	+ .501	− .007	[illegible]	19.19
7518	BD+33° 3040		8.8	8.60	7 41.447	2.1787	+ .0021	+ .003	+33 47 52.13	.673	.317	+ .01	5	18.62
7519	BD+44° 2837		9.3		7 41.921	1.7590	+ .0021	+ 001	+44 31 40.03	.673	.256	− .02	4	18.47
7520	BD+56° 2070	K2	*8.37*	8.48	7 46.823	1.0900	+ .0018	.000	+56 2 6.47	.680	.159	.00	5	19.86
7521	BD+16° 3394		*9.60*	9.1	18 7 53.446	+2.6720	+ .0018	+ .001	+16 42 2.22	+ .690	+ .389	+ .02	[illegible]	18.00
7522	BD+18° 3586	A0	*8.47*	8.51	8 3.148	2.6309	+ .0018	+ .002	+18 18 18.34	.704	.383	− .02	4	18.70
7523	BD+10° 3425	F0	9.24	8.81	8 21.764	2.8362	+ .0017	− .001	+10 2 30.83	.731	.413	− .02	4	18.65
7524	μ Sagittarii	B8	4.01	3.61	8 58.754	3.5874	+ .0006	+ .0003	−21 4 51.60	.785	.522	− .005	5	17.29
7525	BD+37° 3040		*9.22*	8.8	9 1.758	2.0524	+ .0021	+ .002	+37 23 3.90	.790	.299	.00	4	17.66
7526	CD−27° 12588 *br.*	B9	7.4	7.0	18 9 9.286	+3.7685	+ .0001	+ .0002	−27 31 29.95	+ .801	+ .549	− .036	5	19.36
7527	BD+76° 678	F8	7.62	7.81	9 10.31	−2.3296	− .0085	− .0189	+76 6 59.95	.802	− .340	+ .032	4	18.32
7528	CD−25° 12900	B5	8.7		9 11.746	+3.7049	+ .0003	+ .0008	−25 20 0.89	.804	+ .539	− .012	4	18.33
7529	BD+14° 3451		*9.04*	9.2	9 13.310	2.7313	+ .0017	− .001	+14 20 35.44	.807	.398	+ .04	4	18.27
7530	BD− 0° 3443	K2	9.4		9 14.603	3.0909	+ .0013	− .0068	− 0 46 55.79	.808	.450	− .137	4	18.23
7531	BD+48° 2652	K0	6.70	6.77	18 9 29.084	+1.5757	+ .0020	+ .001	+48 16 12.99	+ .830	+ .229	− .03	4	18.26
7532	BD+ 8° 3615		*9.64*		9 48.199	2.8703	+ .0016	+ .002	+ 8 37 21.45	.857	.418	+ .02	4	17.72
7533	BD+61° 1728	K0	*8.43*	8.11	9 54.06	0.6477	+ .0010	− .003	+61 9 53.91	.866	.094	+ .01	4	17.96
7534	BD+41° 3009		*9.76*		9 57.708	1.8701	+ .0021	− .001	+42 0 42.94	.871	.272	+ .01	5	19.93
7535	BD+30° 3150		*8.87*	8.1	10 11.960	2.2771	+ .0020	− .0020	+30 47 34.79	.892	.331	+ .033	4	17.99
7536	BD−18° 4858	A2	8.5	6.97	18 10 18.784	+3.5213	+ .0005	+ .0002	−18 34 25.18	+ .902	+ .512	+ .014	4	18.55
7537	BD+65° 1247	K0	*7.98*	7.74	10 19.49	0.1622	− .0001	− .0072	+65 21 36.15	.903	.023	+ .013	4	18.78
7538	BD+52° 2159	M0	*8.27*	8.06	10 25.479	1.3616	+ .0018	+ .001	+52 2 24.21	.911	.198	− .02	5	19.72
7539	BD− 6° 4729	K5	8.9	8.97	10 45.612	3.2320	+ .0010	− .001	− 6 48 22.06	.941	.470	− .01	4	18.03
7540	BD− 8° 4578	A3	8.1	8.85	11 9.522	3.2725	+ .0009	+ .001	− 8 30 47.18	.975	.476	− .04	4	17.89
7541	BD+36° 3064		*8.10*	7.78	18 12 3.950	+2.0905	+ .0020	.000	+36 21 12.61	+1.055	+ .304	− .03	4	17.74
7542	BD+46° 2447		9.6		12 8.879	1.6417	+ .0019	− .003	+46 59 59.24	1.062	.239	− .06	4	18.00
7543	BD+63° 1486		*9.20*	9.5	12 29.27	0.4174	.0000	− .002	+63 19 9.46	1.092	.060	− .01	4	18.22
7544	Yarn 7736	K5	5.98	5.79	12 32.288	3.4909	+ .0004	+ .0011	−17 24 9.13	1.096	.508	− .008	4	18.30
7545	BD+15° 3419		*9.15*	8.9	12 38.969	2.7141	+ .0017	− .003	+15 2 37.16	1.106	.395	− .01	4	17.90
7546	BD+66° 1088		*9.30*	8.6	18 12 40.37	+0.0621	− .0013	− .0025	+66 5 49.60	+1.108	+ .009	+ .006	4	18.20
7547	BD−20° 5075	A	9.7		12 47.462	3.5762	+ .0001	− .002	−20 40 29.85	1.118	.520	− .01	4	18.21
7548	D'Agel 4670	K0	6.98	6.92	12 49.742	2.2908	+ .0020	+ .0026	+30 22 18.02	1.121	.333	+ .017	4	17.97
7549	Brad 2292	A5	6.30	6.16	12 59.819	3.3028	+ .0007	− .0004	− 9 47 12.69	1.136	.480	− .065	4	17.71
7550	BD+28° 2971	K5	8.1	7.90	13 6.440	2.3589	+ .0019	− .0017	+28 8 46.97	1.146	.343	+ .021	4	18.48
7551	5 B Lyræ	B5	5.42	5.70	18 13 9.368	+1.8659	+ .0020	− .0005	+42 7 52.78	+1.150	+ .271	− .007	4	18.19
7552	BD+23° 3289	K0	7.48	7.28	13 11.632	2.4962	+ .0018	.000	+23 22 9.66	1.154	.363	+ .03	4	18.24
7553	BD+ 2° 3550	A0	*9.11*	8.87	13 13.775	3.0046	+ .0012	− .0004	+ 2 55 26.79	1.156	.437	− .019	4	18.05
7554	BD−12° 4972	B8	9.7		13 24.819	3.3748	+ .0005	− .0013	−12 45 35.50	1.173	.491	− .014	4	18.09
7555	36 Draconis	F5	5.03	5.11	13 26.13	0.2921	− .0007	+ .0532	+64 22 11.96	1.175	.042	+ .031	4	18.71
7556	CD−23° 14212	K0	9.0	8.4	18 14 0.497	+3.6416	− .0003	+ .0020	−23 5 53.21	+1.224	+ .529	+ .012	5	19.71
7557	Wi (1) 18^{h} 253	B5	6.18	5.96	14 23.138	2.7485	+ .0015	− .0012	+13 44 44.84	1.258	.398	− .008	4	18.06
7558	BD+17° 3520	Mb	*7.30*	6.99	14 23.409	2.6407	+ .0016	.000	+17 56 56.95	1.258	.383	+ .06	4	18.28
7559	BD− 2° 4591	G0	8.7	8.4	14 24.734	3.1340	+ .0009	+ .0031	− 2 37 46.86	1.259	.455	− .045	4	18.28
7560	BD+ 5° 3685	B9	7.41	7.65	14 31.832	2.9536	+ .0013	+ .0008	+ 5 6 12.43	1.270	.429	− .016	4	18.58

7502. $10^{m}7$, $2''2$, 145°.

7508. $5^{m}80$, $20''$, 53°.

7509. $6^{m}18$, $20''$, 233°.

7526. 14^{m}, $4''6$, 330°.

No.	Name	Sp.	Mag.	Obs Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7561	BD+77° 687 *br.*		*9.40*	9.2	18 14 40.68	− 2.7815	−0.0201	−0.0021	+77 10 0.90	+1.283	−0.405	+0.005	4	18.60
7562	BD− 4° 4438	K0	7.60	7.15	14 45.596	+ 3.1692	+ .0009	+ .0018	− 4 8 17.25	1.290	+ .460	− .001	4	18.32
7563	Cape (80) 9986	B9	6.72		14 55.033	4.0226	− .0016	+ .0004	−35 27 45.38	1.304	.584	− .016	5	20.16
7564	BD+51° 2344	K5	*7.90*	8.4	14 56.186	1.4143	+ .0016	.000	+51 11 54.17	1.306	.205	− .01	4	18.53
7565	CD−24° 14185	B9	10.2		15 5.585	3.6841	− .0006	.0000	−24 37 57.87	1.319	.535	− .005	5	20.20
7566	BD+37° 3070		*8.85*	8.7	18 15 10.920	+ 2.0329	+ .0019	− .001	+37 56 55.40	+1.327	+ .295	− .06	4	18.33
7567	BD+ 0° 3918	K5	*7.86*	7.78	15 21.223	3.0539	+ .0010	− .0003	+ 0 48 29.62	1.342	.444	+ .006	4	19.21
7568	BD+54° 1965	A3	*9.40*	8.7	15 26.507	1.1877	+ .0012	+ .003	+54 43 37.69	1.349	.172	+ .01	5	19.94
7569	BD+12° 3469	B8	7.34	7.4	15 31.910	2.7771	+ .0015	.000	+12 30 1.38	1.357	.403	+ .01	4	19.17
7570	BD+43° 2940		*9.62*		15 51.575	1.8229	+ .0019	.000	+43 9 9.43	1.386	.264	.00	4	19.42
7571	δ Sagittarii	K0	2.84	3.68	18 15 52.380	+ 3.8381	− .0012	+ .0028	−29 51 47.99	+1.387	+ .557	− .036	5	19.77
7572	Brad 2300	K5	5.49	5.44	15 53.083	2.4676	+ .0018	+ .0012	+24 24 42.54	1.388	.358	− .004	5	19.97
7573	BD+45° 2690	A0	7.87	7.9	15 53.303	1.7338	+ .0018	.000	+45 7 23.87	1.389	.251	+ .01	4	19.18
7574	BD−15° 4938	K2	7.45	6.88	16 27.317	3.4365	+ .0001	+ .0008	−15 16 0.95	1.438	.499	.000	4	19.30
7575	BD+ 6° 3701	A0	8.0	8.12	16 29.152	2.9206	+ .0013	− .001	+ 6 30 30.12	1.441	.424	+ .02	4	19.44
7576	BD+31° 3239	A0	8.0	8.13	18 16 47.431	+ 2.2684	+ .0019	− .0017	+31 6 31.91	+1.468	+ .330	− .010	4	19.30
7577	BD+10° 3480		9.1	8.91	16 49.666	2.8169	+ .0014	− .003	+10 51 51.88	1.470	.409	+ .01	4	18.79
7578	BD+20° 3738	M2	*9.13*	8.9	16 51.618	2.5850	+ .0017	− .001	+20 6 1.10	1.474	.375	.00	4	19.54
7579	Brad 2299	G5	4.92	4.83	16 52.361	2.9949	+ .0011	− .0010	+ 3 20 25.09	1.474	.435	− .003	4	19.23
7580	BD+49° 2765	A7	*8.39*	8.92	17 3.808	1.4883	+ .0015	− .0030	+49 55 56.00	1.491	.216	+ .031	4	19.51
7581	BD+16° 3466		8.5	8.43	18 17 5.866	+ 2.6794	+ .0016	.000	+16 26 39.36	+1.494	+ .389	− .04	4	19.02
7582	η Serpentis	K0	3.42	3.38	17 10.226	3.1407	+ .0007	− .0375	− 2 55 13.65	1.500	.456	− .700	120 80	18.97 18.93
7583	BD+39° 3385	K5	8.47	8.45	17 11.119	1.9719	+ .0019	.000	+39 33 34.78	1.502	.286	− .03	4	18.61
7584	BD+57° 1858	K0	*9.50*		17 14.515	+ 0.9816	+ .0005	.000	+57 29 33.27	1.506	+ .142	− .01	4	19.20
7585	BD+69° 973	F5	*8.35*	8.30	17 23.46	− 0.5250	− .0058	− .0023	+69 40 35.96	1.520	− .077	− .008	4	19.25
7586	BD−16° 4839	B8	9.7		18 17 42.616	+ 3.4781	− .0002	− .0001	−16 55 22.21	+1.548	+ .506	+ .027	4	19.49
7587	BD+84° 410	F0	*8.75*	8.44	17 43.31	−10.4099	− .1747	+ .0122	+84 21 22.87	1.549	−1.514	+ .005	5	19.15
7588	BD+59° 1889	K5	*8.97*	9.13	17 48.666	+ 0.8163	.0000	+ .011	+59 26 23.12	1.556	+ .118	+ .05	4	18.74
7589	BD− 6° 4745		9.7	9.3	17 50.538	3.2142	+ .0006	+ .002	− 6 3 50.86	1.559	.466	+ .02	4	19.15
7590	BD+ 9° 3673		*8.88*	8.71	17 58.356	2.8587	+ .0013	− .002	+ 9 7 27.50	1.570	.416	+ .01	6	18.88
7591	BD−18° 4938	A0	9.7		18 18 5.069	+ 3.5251	− .0004	.0000	−18 45 30.55	+1.580	+ .511	+ .001	4	19.52
7592	CD−27° 12782	A0	7.9	7.3	18 24.798	3.7674	− .0014	+ .0012	−27 32 35.15	1.609	.546	− .020	4	18.31
7593	446 B Herculis	K5	5.66	5.28	18 48.481	2.5007	+ .0017	+ .0011	+23 14 37.46	1.643	.362	+ .075	4	19.53
7594	ε Sagittarii	A0	1.95		18 51.801	3.9854	− .0023	− .0035	−34 25 25.45	1.648	.578	− .132	4	18.95
7595	BD+46° 2466		9.0	9.1	18 56.773	1.6693	+ .0016	− .004	+46 30 5.33	1.655	.241	+ .06	4	19.06
7596	CD−29° 14894	Ma	8.5	7.72	18 19 6.650	+ 3.8149	− .0016	+ .0003	−29 7 50.18	+1.670	+ .553	− .023	4	19.27
7597	BD+53° 2073	K2	*8.47*	8.31	19 41.163	+ 1.2413	+ .0008	.000	+53 58 57.00	1.720	+ .179	+ .03	4	18.51
7598	BD+66° 1100	K2	*8.22*	8.26	19 48.91	− 0.0256	− .0040	+ .0030	+66 44 48.26	1.731	− .004	+ .013	4	18.71
7599	BD− 0° 3474	A2	8.58	8.5	19 56.096	+ 3.0737	+ .0007	+ .0029	− 0 2 38.86	1.742	+ .445	− .023	4	19.03
7600	BD−10° 4684	K2	8.5	8.41	20 4.212	3.3184	+ .0001	− .0008	−10 27 23.16	1.753	.481	− .045	4	18.44
7601	BD− 8° 4599	F0	7.28	7.35	18 20 8.593	+ 3.2649	+ .0002	+ .001	− 8 13 1.25	+1.760	+ .474	.00	4	18.81
7602	BD−12° 5036	B9	8.9	8.62	20 10.101	3.3732	− .0001	.0000	−12 43 6.91	1.762	.489	− .018	5	19.97
7603	109 Herculis	K0	3.92	3.78	20 17.267	2.5421	+ .0017	+ .0138	+21 43 57.12	1.772	.368	− .261	135 107	19.07 19.36
7604	CD−23° 14344	K0	8.7	7.90	20 17.308	3.6384	− .0010	− .0005	−23 1 29.70	1.772	.528	− .054	4	19.10
7605	BD+58° 1806	G0	*8.58*	9.1	20 18.971	0.8739	− .0002	− .014	+58 48 38.26	1.775	.126	+ .23	4	18.81
7606	BD+25° 3510	K0	8.8	8.61	18 20 19.317	+ 2.4371	+ .0018	+ .0011	+25 31 26.67	+1.775	+ .353	− .025	5	19.98
7607	BD+43° 2962	G5	*8.19*	7.95	20 28.667	1.7923	+ .0017	− .0010	+43 53 24.15	1.789	.260	+ .004	4	18.69
7608	BD+34° 3189		*8.99*	9.37	20 28.698	2.1421	+ .0019	+ .003	+34 57 39.50	1.789	.310	+ .01	4	18.57
7609	Brad 2303 *br.*	*	5.06	5.49	20 35.169	3.5726	− .0008	+ .0006	−20 35 8.45	1.798	.518	− .021	5 4	19.77 18.61
7610	BD+28° 2992 *m.*	F8	*9.45*	9.1	21 1.327	2.3573	+ .0018	− .0005	+28 15 41.70	1.836	.342	+ .028	5	19.89
7611	BD+32° 3118	A0	*8.1*	8.30	18 21 26.456	+ 2.2385	+ .0018	+ .001	+32 5 10.65	+1.872	+ .325	− .02	4	18.17
7612	μ Lyrae	A2	5.04	5.25	21 35.618	1.9774	+ .0018	− .0018	+39 27 46.30	1.886	.286	− .010	5	19.31
7613	BD− 3° 4284		9.4		21 36.942	3.1584	+ .0004	− .0003	− 3 41 1.92	1.888	.458	− .010	4	18.75
7614	BD+ 1° 3698	K0	*9.05*	9.3	21 44.763	3.0423	+ .0007	+ .0015	+ 1 18 30.08	1.899	.441	+ .008	5 4	20.62 21.44
7615	Pulk (55) 2591	*	5.69	5.79	21 47.829	+ 2.8861	+ .0011	− .0003	+ 7 59 9.86	1.904	+ .418	− .001	4	18.26
7616	φ Draconis *m.*	A0	4.24	4.58	18 21 54.36	− 0.8561	− .0108	− .0008	+71 17 44.30	+1.913	− .125	+ .032	9	19.54
7617	CD−24° 14337		10.4	ft.	22 16.748	+ 3.6667	− .0015	− .0041	−24 3 53.19	1.946	+ .531	+ .017	4	19.08
7618	χ Draconis	F8	3.69	4.01	22 29.95	− 1.1968	− .0143	+ .1173	+72 41 55.15	1.965	− .174	− .365	10	19.07
7619	BD+23° 3331	G	*9.5*	9.2	22 34.600	+ 2.5089	+ .0016	− .001	+23 9 24.80	1.971	+ .362	− .03	5	17.89
7620	BD+15° 3465		9.4		22 37.493	2.6920	+ .0014	.000	+15 58 33.58	1.973	.380	.00	4	18.50

7561. $12^{m}4$, $1''9$, 160°.
7609. K0, A0. $5^{m}3$, $1''9$, 290°.

7610. $10^{m}0$ $10^{m}4$, $0''4$, 270°.
7615. G0, A3.

7616. $4^{m}4$ $6^{m}1$, $0''3$, 32°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7621	BD+38° 3166	A0	7.12	7.65	18 22 41.474	+ 2.0189	+0.0017	+0.001	+38 23 39.50	+1.981	+0.293	0.00	4	18.26
7622	b Draconis br.	A2	4.94	4.98	22 44.513	0.8810	− .0005	− .0043	+58 45 14.28	1.986	.127	+ .055	4	19.01
7623	BD+19° 3643	K5	*8.12*	7.71	22 52.678	2.6114	+ .0015	.000	+19 8 1.54	1.997	.378	+ .02	4	18.04
7624	Pulk (55) 2594	A2	5.71	6.20	22 53.564	2.3117	+ .0018	+ .0008	+29 46 55.29	1.999	.334	− .033	4	18.77
7625	λ Sagittarii	K0	2.94	2.8	23 1.995	3.7060	− .0017	− .0035	−25 28 1.19	2.011	.536	− .191	4	17.95
7626	Lac 7724	A3	6.28	6.8	18 23 6.654	+ 3.7445	− .0020	− .0005	−26 48 22.12	+2.018	+ .542	− .042	4	18.50
7627	BD−16° 4884	A0	8.0	7.8	23 10.597	+ 3.4659	− .0007	+ .0003	−16 28 36.34	2.024	+ .502	− .006	4	18.67
7628	BD+85° 304		*9.20*	9.3	23 12.26	−13.613	− .366	+ .018	+85 26 39.46	2.026	−1.975	− .011	4	18.78
7629	BD+ 9° 3714	G5	7.5	7.42	23 13.169	+ 2.8583	+ .0010	− .006	+ 9 9 43.13	2.028	+ .413	− .03	4	18.33
7630	BD+48° 2692	G5	7.24	7.13	23 13.287	1.5586	+ .0012	+ .003	+48 42 52.39	2.028	.225	+ .02	4	18.26
7631	BD+42° 3078		9.1	8.77	18 23 40.410	+ 1.8477	+ .0016	− .002	+42 39 47.37	+2.066	+ .267	− .03	[illegible]	18.47
7632	BD− 6° 4769	F	8.5	8.10	23 49.422	+ 3.2171	+ .0001	.000	− 6 12 5.65	2.080	+ .466	+ .02	[illegible]	18.02
7633	BD+75° 667	A0	*8.58*	8.36	24 1.51	− 2.0679	− .0256	− .0005	+75 30 17.44	2.097	− .301	− .010	5	19.68
7634	BD+34° 3207	A2	*8.59*	8.45	24 5.741	+ 2.1547	+ .0018	.000	+34 38 12.46	2.104	+ .312	− .02	4	18.08
7635	BD−14° 5069	F2	9.1	8.7	24 12.302	3.4100	− .0006	+ .0015	−14 14 26.29	2.113	.494	− .002	4	17.96
7636	BD+13° 3648		*9.45*		18 24 14.569	+ 2.7588	+ .0012	+ .001	+13 17 28.43	+2.116	+ .399	+ .02	4	17.96
7637	2 H Scuti	A3	4.73	4.72	24 38.267	3.4192	− .0008	+ .0002	−14 37 4.80	2.151	.495	− .008	5	18.55
7638	BD+47° 2637		*8.83*	8.63	24 50.104	1.6321	+ .0014	− .002	+47 19 8.15	2.168	.236	+ .03	4	18.49
7639	BD+ 4° 3760 m.		*8.65*	8.65	25 5.244	2.9779	+ .0007	− .0024	+ 4 4 53.90	2.190	.431	− .018	4	17.89
7640	BD+11° 3478	G0	*7.47*	7.79	25 17.958	2.8001	+ .0013	− .004	+11 35 52.41	2.208	.405	+ .01	4	17.75
7641	c Serpentis	K0	5.44	5.46	18 25 31.166	+ 3.1200	+ .0003	+ .0015	− 2 2 16.70	+2.227	+ .451	− .031	4	17.73
7642	BD+59° 1898	K0	7.16	7.03	25 34.367	0.8041	− .0013	+ .0005	+59 39 18.62	2.232	.115	+ .001	[illegible]	18.29
7643	BD+60° 1829		*9.05*	9.1	25 49.00	0.7484	− .0016	.000	+60 15 37.89	2.253	.107	+ .03	4	18.30
7644	75 G Sagittarii br.	A3	5.44		25 49.984	3.9365	− .0034	− .0004	−33 2 36.03	2.255	.569	− .052	5	19.03
7645	BD+37° 3130	A2	8.31	8.40	25 56.942	2.0649	+ .0017	− .001	+37 11 57.95	2.265	.298	.00	5 4	19.12 18.97
7646	BD+25° 3538	A2	*9.31*	8.9	18 25 58.481	+ 2.4284	+ .0016	+ .0006	+25 53 7.45	+2.267	+ .351	+ .010	[illegible]	17.96
7647	BD+29° 3272	F5	*9.19*	8.7	26 27.873	+ 2.3086	+ .0017	+ .0017	+29 55 30.24	2.309	+ .333	− .016	3	17.24
7648	BD+70° 998	A0	*8.28*	8.52	26 41.10	− 0.6487	− .0119	− .0014	+70 22 14.39	2.329	− .095	+ .006	5	17.68
7649	BD−11° 4655	F0	8.5	8.8	26 42.787	+ 3.3535	− .0006	+ .0003	−11 56 45.98	2.331	+ .485	− .012	4	18.01
7650	Dorp (30) 2100	B3	5.80	5.76	26 59.464	3.3271	− .0006	− .0011	−10 51 7.78	2.355	.481	− .026	4	17.90
7651	CD−29° 15052	B8	9.3		18 26 59.726	+ 3.8135	− .0028	+ .0013	−29 10 9.71	+2.355	+ .551	− .026	4	17.98
7652	BD− 0° 3501	B8	7.01	7.09	27 15.140	3.0852	+ .0003	.0000	− 0 32 19.31	2.378	.446	− .002	[illegible]	18.02
7653	Pulk (55) 2607	A0	5.67	5.98	27 30.880	2.6703	+ .0013	− .0035	+16 52 20.17	2.401	.388	− .023	[illegible]	19.72
7654	BD+ 7° 3729	G0	7.55	7.25	27 35.093	2.8870	+ .0008	− .001	+ 7 58 12.71	2.407	.416	.00	4	18.20
7655	BD−18° 4993	A5	9.31	9.1	27 46.151	3.5144	− .0014	+ .0002	−18 24 50.45	2.423	.508	− .008	[illegible]	18.03
7656	BD+63° 1427		*9.02*	8.8	18 27 49.96	+ 0.4567	− .0036	− .004	+63 6 44.01	+2.428	+ .065	+ .04	4	18.51
7657	BD+22° 3394	G5	*7.74*	7.36	28 6.210	2.5117	+ .0015	+ .002	+22 55 38.47	2.452	.362	+ .05	[illegible]	18.08
7658	BD+41° 3074		*8.54*	8.62	28 15.840	1.8978	+ .0015	.000	+41 32 19.80	2.466	.274	.00	5	19.59
7659	BD− 8° 4627	F0	9.1		28 18.498	3.2604	− .0003	+ .001	− 8 3 18.37	2.469	.471	+ .01	4	18.03
7660	BD+24° 3445	M0	*9.14*		28 18.632	2.4575	+ .0016	+ .0021	+24 53 14.90	2.470	.354	− .026	4	18.53
7661	Grmb 2589	F5	7.17	7.23	18 28 24.434	+ 1.9180	+ .0016	− .0038	+41 2 54.25	+2.478	+ .277	+ .016	4	18.04
7662	BD+50° 2602	K0	*8.77*	8.4	28 33.852	1.4856	+ .0009	− .001	+50 7 21.46	2.492	.214	− .04	4	18.28
7663	Lac 7761	B3	5.38		28 42.928	3.9363	− .0039	+ .0003	−33 4 37.30	2.505	.568	− .008	[illegible]	18.78
7664	BD−20° 5179	B9	8.1	8.36	28 43.582	+ 3.5665	− .0018	+ .0030	−20 25 41.73	2.506	+ .515	+ .003	4	18.31
7665	BD+79° 586	A3	*8.30*	9.1	28 54.71	− 3.8227	− .0649	− .0028	+79 7 1.11	2.522	− .554	+ .050	[illegible]	18.52
7666	BD+32° 3149		*9.37*		18 29 26.324	+ 2.2193	+ .0017	− .001	+32 46 45.13	+2.567	+ .320	− .02	4	18.26
7667	BD+ 5° 3785		10.4		29 37.836	2.9338	+ .0006	− .002	+ 5 59 11.15	2.584	.423	+ .05	6	20.56
7668	BD+64° 1271		*8.85*	8.9	30 1.88	0.3398	− .0049	− .0002	+64 8 11.91	2.619	.048	+ .032	4	18.32
7669	Grmb 2596	F8	6.90	6.98	30 10.706	2.0086	+ .0016	− .0010	+38 46 26.67	2.632	.288	− .098	7	20.25
7670	Grmb 2601	B9	6.43	6.74	30 21.434	1.3739	+ .0004	− .0010	+52 3 17.60	2.647	.198	+ .003	4	18.69
7671	BD−22° 4790	B3	8.1	8.04	18 30 31.500	+ 3.6120	− .0022	.0000	−22 9 17.04	+2.662	+ .521	− .009	4	18.23
7672	BD+ 3° 3747	A2	7.50	7.68	30 35.106	3.0016	+ .0004	+ .0001	+ 3 4 21.42	2.668	.432	− .019	4	18.49
7673	13 G Scuti	G5	5.25	5.14	30 35.599	3.3311	− .0009	+ .0035	−11 2 26.45	2.668	.480	− .008	4	18.48
7674	BD+40° 3411	F5	7.22	7.37	30 38.159	1.9576	+ .0015	− .0066	+40 5 47.78	2.672	.281	+ .051	4	18.80
7675	3 H Scuti	K0	4.06	3.86	30 51.210	3.2659	− .0006	− .0015	− 8 18 3.75	2.690	.470	− .317	141 100	19.35 19.26
7676	Lal 34436	A2	6.44	6.55	18 30 53.016	+ 2.5801	+ .0013	+ .0001	+20 24 12.25	+2.693	+ .371	+ .002	4	18.72
7677	BD− 4° 4501		9.7		30 56.698	3.1693	− .0002	+ .0023	− 4 10 25.28	2.698	.456	+ .012	4	18.34
7678	Wi (1) 18^h 668	A0	6.38	6.47	31 1.828	2.8194	+ .0009	+ .0012	+10 49 41.48	2.706	.406	− .002	4	18.73
7679	BD+33° 3138		*9.37*	8.9	31 9.212	2.1831	+ .0016	+ .004	+33 53 45.50	2.717	.314	.00	4	18.64
7680	Brad 2340	F8	4.95	4.98	31 11.654	1.0352	− .0011	− .0005	+56 59 2.29	2.720	.148	− .010	4	18.51

7622. 7^m6, $3''4$, 356°.

7639. 9^m1-9^m6, $0''3$, 87°.

7644. 11^m, $3''3$, 198°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7681	Grmb 2603	A0	6.66	6.38	18 31 32.019	+1.6945	+0.0011	+0.0003	+16 9 19.84	+2.749	+0.244	+0.012	5	17.76
7682	BD−13° 5046	B9	8.1	7.70	31 40.343	3.4003	− .0013	+ .0009	−13 53 57.51	2.761	.490	.000	4	18.35
7683	CD−24° 14521	K0	9.15	8.0	31 53.373	3.6866	− .0029	+ .0006	−24 53 1.91	2.780	.531	− .026	5	20.11
7684	BD+21° 3488	A2	8.8	8.8	31 53.880	2.5466	+ .0014	− .001	+21 40 42.82	2.781	.366	+ .01	4	18.45
7685	BD+ 4° 3803 *br.*	G0	8.91	9.1	32 5.942	+2.9560	+ .0005	− .0022	+ 5 2 32.48	2.798	+ .426	− .034	5	19.43
7686	Fedor 2982	K5	6.81	6.57	18 32 31.72	−0.1551	− .0099	− .0037	+67 42 50.99	+2.836	− .024	− .021	12 11	18.64 18.83
7687	BD+27° 3053	K0	8.0	7.90	32 34.412	+2.3944	+ .0016	+ .0002	+27 8 43.89	2.839	+ .345	− .026	4	18.24
7688	BD−16° 4957		10.1		32 35.878	3.4546	− .0016	+ .0002	−16 6 10.09	2.842	.497	− .004	4	18.40
7689	BD+ 9° 3783	F2	5.40	5.77	32 38.806	+2.8618	+ .0007	− .0006	+ 9 3 31.18	2.846	+ .412	− .128	4	17.70
7690	BD+72° 848	G0	*8.05*	8.28	32 43.48	−1.2591	− .0234	+ .0109	+73 1 10.78	2.852	− .183	+ .121	5	19.59
7691	BD+12° 3599		*9.45*		18 32 58.324	+2.7664	+ .0010	− .002	+13 2 21.15	+2.874	+ .398	+ .02	4	18.23
7692	BD+17° 3648		*9.53*		33 0.525	2.6566	+ .0012	− .001	+17 27 50.81	2.877	.382	− .02	4	17.97
7693	Wi (1) 18^h 715	F8	7.02	6.98	33 5.097	3.0523	+ .0001	− .0002	+ 0 52 57.65	2.884	.439	+ .010	4	18.30
7694	Pi 18^h 128	F2	6.80	6.6	33 12.796	3.4846	− .0019	− .0009	−17 18 0.11	2.895	.501	+ .003	4	18.10
7695	BD+54° 2013	K2	*8.25*	7.71	33 20.044	+1.2433	− .0003	.000	+54 8 31.00	2.905	+ .178	+ .06	4	18.27
7696	Grmb 2655	K0	5.84	5.54	18 33 37.30	−2.8833	− .0540	− .0008	+77 29 8.08	+2.930	− .418	− .005	8	19.18
7697	BD+28° 3030	A7	9.8		33 52.522	+2.3451	+ .0016	− .0026	+28 49 59.75	2.952	+ .337	+ .023	4 5	18.25 17.32
7698	CD−28° 14820	K2	8.7		34 11.051	3.7928	− .0039	− .0007	−28 35 5.07	2.979	.545	− .017	4	18.03
7699	α Lyræ	A0	0.14	0.56	34 13.777	2.0137	+ .0015	+ .0173	+38 42 31.20	2.983	.289	+ .279	49 48	22.30 22.34
7700	BD− 6° 4823	F2	8.7	8.50	34 20.958	3.2130	− .0006	.000	− 6 3 39.04	2.993	.461	+ .02	4	19.57
7701	BD+15° 3525	A0	8.01	8.06	18 34 33.705	+2.7164	+ .0010	.000	+15 5 37.09	+3.012	+ .391	+ .03	4	17.77
7702	Brad 2412	A2	6.15	6.29	34 44.78	−7.8738	− .2239	+ .0063	+83 7 7.96	3.027	−1.136	− .026	9	19.25
7703	BD+31° 3311		8.6	8.73	34 55.100	+2.2632	+ .0016	− .0009	+31 30 11.29	3.044	+ .324	+ .016	5	19.27
7704	BD+64° 1275		*9.35*		34 59.98	+0.2604	− .0069	+ .0011	+64 50 34.97	3.049	+ .036	+ .001	4	18.48
7705	BD+70° 1008		*9.28*		35 1.49	−0.5928	− .0160	− .0043	+70 11 4.48	3.052	− .087	+ .032	4	18.29
7706	BD+44° 2948		8.7	8.73	18 35 34.755	+1.7529	+ .0011	+ .006	+44 59 25.93	+3.090	+ .251	− .02	4	18.00
7707	BD− 1° 3534	A2	8.6	7.79	35 41.677	3.1041	− .0002	+ .0011	− 1 21 44.12	3.109	.446	− .003	4	18.00
7708	BD+61° 1759		*8.80*	9.1	35 44.50	0.0665	− .0039	− .004	+61 14 56.91	3.113	.094	− .04	4	18.52
7709	BD− 7° 4650	B0	9.7		35 50.317	3.2424	− .0009	− .001	− 7 19 26.65	3.122	.465	− .01	5	19.73
7710	Grmb 2640	A3	6.00	6.04	35 58.26	0.1875	− .0079	+ .0015	+65 25 0.85	3.133	.026	+ .082	4	18.78
7711	BD− 9° 4790	B8	8.5	8.4	18 35 58.525	+3.2868	− .0011	− .001	− 9 12 51.00	+3.133	+ .472	+ .02	4	17.98
7712	BD+18° 3772		*9.13*	9.1	36 3.947	2.6306	+ .0012	− .001	+18 31 3.58	3.142	.377	− .01	4	18.04
7713	BD+ 3° 3769	A0	*9.60*	8.60	36 5.162	2.9970	+ .0001	+ .0002	+ 3 16 59.24	3.143	.430	+ .006	4	17.95
7714	CD−26° 13371	F5	8.1	8.3	36 7.279	3.7398	− .0039	.0000	−26 48 56.75	3.146	.537	+ .010	4	18.64
7715	BD−19° 5124	A0	8.8	8.68	36 30.284	3.5409	− .0024	− .0028	−19 32 18.35	3.180	.508	− .004	4	18.25
7716	BD+48° 2734		*9.34*	8.8	18 36 31.267	+1.5582	+ .0006	+ .009	+48 56 17.31	+3.181	+ .222	+ .07	5 4	17.62 17.92
7717	BD+24° 3489	K0	8.46	7.98	36 32.848	2.4593	+ .0014	.0000	+24 56 5.41	3.183	.352	+ .011	4	18.27
7718	Pi 18^h 174	A0	5.60	5.74	36 50.17	0.5437	− .0050	+ .0010	+62 27 12.40	3.208	.077	+ .031	5	17.47
7719	CD−23° 14625	A2	6.14	6.3	36 58.910	3.6575	− .0034	+ .0024	−23 54 32.88	3.221	.526	− .028	4	18.24
7720	CD−29° 15244	B9	8.7		37 6.358	3.8243	− .0046	+ .0025	−29 40 42.48	3.231	.548	− .006	4	18.31
7721	BD−11° 4709	G0	8.7	8.1	18 37 14.301	+3.3397	− .0014	.0000	−11 26 35.02	+3.243	+ .479	− .056	4	17.98
7722	BD+ 8° 3804		9.1	8.7	37 34.947	2.8746	+ .0006	− .002	+ 8 32 51.33	3.272	.412	+ .01	4	18.23
7723	4 H Scuti	F0	4.74	4.86	37 53.596	3.2845	− .0012	+ .0009	− 9 7 48.67	3.299	.470	− .004	4	17.69
7724	BD+ 6° 3898	Np	*9.23*	8.79	38 3.600	2.9169	+ .0003	.000	+ 6 44 28.77	3.314	.418	+ .02	4	18.20
7725	BD+42° 3134		9.3		38 3.806	1.8509	+ .0011	.000	+42 49 51.91	3.314	.264	− .01	4	18.28
7726	BD+53° 2113	A0	*8.56*	8.3	18 38 10.858	+1.3079	− .0006	− .001	+53 15 0.12	+3.324	+ .187	+ .03	4	18.53
7727	BD+72° 858	G5	*8.52*	8.07	38 21.47	−1.0297	− .0247	+ .0015	+72 11 36.14	3.339	− .149	+ .037	4	18.06
7728	BD+ 1° 3758	G5	*9.52*		38 30. [illegible]	+3.0357	− .0001	− .0015	+ 1 36 29.55	3.353	+ .435	− .003	4	17.62
7729	BD−21° 5117	G5	9.1	8.3	38 35.108	3.5890	− .0031	+ .0002	−21 23 55.35	3.359	.515	− .027	4	18.52
7730	BD+11° 3567		*9.47*		38 38.198	2.8133	+ .0006	+ .005	+11 8 26.68	3.363	.403	+ .02	4	18.52
7731	Wi (2) 18^h 1091	A0	6.47	6.70	18 38 39.992	+2.2642	+ .0015	.0000	+31 32 23.49	+3.366	+ .324	− .002	4	17.83
7732	BD+39° 3493		[illegible]	8.9	38 41.823	1.9958	+ .0014	+ .003	+39 15 52.49	3.369	.285	− .03	7	19.77
7733	BD− 3° 4360	K0	8.7	8.14	39 6.107	3.1479	− .0006	− .0004	− 3 16 4.93	3.403	.450	+ .069	4	18.05
7734	5 H Scuti	G5	5.09	5.31	39 9.809	3.2661	− .0012	+ .0013	− 8 21 19.52	3.409	.467	+ .010	4	18.16
7735	BD−15° 5076	Ma	8.9	8.45	39 10.807	3.4343	− .0022	− .0014	−15 21 13.65	3.410	.492	+ .018	5	19.57
7736	BD+13° 3713	A0	7.39	7.7	18 39 13.560	+2.7569	+ .0007	.000	+13 29 15.48	+3.414	+ .395	+ .01	4	18.30
7737	BD− 5° 4738	A2	8.42	8.1	39 14.176	3.2006	− .0009	+ .001	− 5 32 44.89	3.415	.458	− .01	4	18.30
7738	BD+22° 3454	A5	*9.67*		39 18.376	2.5835	+ .0012	.000	+22 16 2.73	3.421	.362	.00	4	18.03
7739	BD+55° 2104	K0	*9.00*	9.2	39 33.058	1.1611	− .0014	+ .001	+55 26 45.61	3.442	.166	+ .02	4	18.43
7740	Pi 18^h 155	B8	5.76	5.75	39 54.551	3.6800	− .0040	− .0001	−25 5 32.81	3.473	.528	− .026	5	19.61

7685. 12^m2, 4″4, 7°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7741	BD+36° 3243	Nb	8.10	7.80	18 40 3.022	+2.0854	+0.0015	+0.0006	+36 52 42.50	+3.485	+0.298	−0.018	5	19.35
7742	BD+27° 3091	K0	*8.16*	8.35	40 31.493	2.3723	+ .0014	+ .0007	+28 1 49.25	3.526	.339	− .044	4	18.46
7743	ϕ Sagittarii	B8	3.30	3.46	40 39.575	+3.7451	− .0046	+ .0036	−27 4 26.83	3.538	+ .536	− .003	5	19.18
7744	BD+76° 696		*9.18*	8.9	40 46.39	−2.3570	− .0534	+ .0020	+76 23 0.13	3.548	− .340	− .013	4	18.01
7745	BD+61° 1768	K5	7.37	7.26	40 48.62	+0.6539	− .0050	− .004	+61 27 55.09	3.551	+ .092	+ .06	5	17.79
7746	BD−17° 5310	B3	7.06	7.11	18 40 57.859	+3.4906	− .0027	.0000	−17 37 42.00	+3.564	+ .499	− .032	4	18.51
7747	BD−13° 5093	F2	7.9	7.4	41 8.286	3.3946	− .0022	.0000	−13 45 15.09	3.579	.485	− .033	4	18.26
7748	BD+49° 2849	K5	7.98	7.90	41 11.574	1.5259	+ .0002	− .005	+49 38 8.05	3.583	.217	.00	4	17.96
7749	Brad 2345	K2	5.80	5.3	41 31.172	3.6166	− .0037	+ .0019	−22 28 37.26	3.612	.517	+ .001	4	18.08
7750	ϵ^1 Lyræ *s. pr.*	A3	5.06	5.54	41 41.276	+1.9860	+ .0013	+ .0008	+39 35 8.06	3.626	+ .283	+ .051	5	20.15
7751	BD+69° 997		*9.22*		18 41 43.16	−0.4368	− .0175	+ .0146	+69 28 11.53	+3.629	− .064	+ .100	4	18.31
7752	ϵ^2 Lyræ *n. pr.*	A5	5.14	5.70	41 43.584	+1.9882	+ .0013	+ .0014	+39 31 42.00	3.629	+ .284	+ .062	4	19.06
7753	BD+ 3° 3794	G0	*9.17*	8.9	42 3.864	2.9919	− .0001	+ .0007	+ 3 31 15.66	3.658	.427	+ .039	4	18.06
7754	BD+34° 3302	B9	7.12	7.33	42 11.188	2.1554	+ .0014	.000	+34 55 26.36	3.669	.307	+ .03	4	18.28
7755	110 Herculis	F5	4.26	4.12	42 13.097	2.5823	+ .0011	− .0015	+20 28 8.01	3.672	.368	− .344	155 117	19.46 19.93
7756	CD−27° 13211	F8	8.7		18 42 37.426	+3.7662	− .0051	+ .0004	−27 50 12.51	+3.707	+ .538	− .089	4	18.33
7757	BD+74° 790		*9.35*		42 40.12	−1.5861	− .0384	− .0017	+74 15 27.92	3.710	− .229	− .004	4	18.31
7758	BD+11° 3599	K5	8.5	8.26	42 52.666	+2.7929	+ .0006	− .002	+12 1 50.35	3.728	+ .398	+ .02	4	18.34
7759	6 H Scuti	G0	4.47	4.57	42 55.791	3.1837	− .0011	− .0007	− 4 50 4.18	3.733	.454	− .023	4	18.36
7760	BD+57° 1900	G0	*7.77*	7.40	43 8.184	1.0359	− .0025	+ .003	+57 11 52.85	3.751	.147	+ .11	4	18.34
7761	Lal 34925	K5	6.27	6.03	18 43 10.736	+2.6304	+ .0010	+ .0090	+18 37 11.14	+3.754	+ .375	− .027	5	19.74
7762	111 Herculis	A3	4.37	4.51	43 29.220	2.6440	+ .0010	+ .0044	+18 5 29.46	3.781	.377	+ .106	4	19.14
7763	BD+40° 3481		*8.85*	8.28	43 31.207	1.9640	+ .0013	.000	+40 11 36.76	3.784	.280	− .01	5	19.57
7764	BD+56° 2133	K2	*8.94*	9.4	43 33.325	1.0893	− .0023	+ .001	+56 30 34.47	3.787	.154	+ .02	4	18.61
7765	BD− 9° 4839		9.9		43 45.295	+3.2851	− .0017	+ .001	− 9 11 49.06	3.804	+ .469	+ .03	4	18.31
7766	BD+71° 907		*9.22*	8.8	18 43 47.38	−0.8208	− .0248	+ .0050	+71 22 37.59	+3.807	− .119	+ .034	4	18.50
7767	BD−19° 5170	B8	8.68		43 47.906	+3.5444	− .0035	+ .0006	−19 46 29.28	3.807	+ .506	− .001	4	18.51
7768	BD+ 4° 3884	K5	6.34	6.17	44 4.444	2.9775	− .0002	− .0013	+ 4 9 7.69	3.831	.424	.000	4	18.19
7769	BD+15° 3569	F0	8.4	8.88	44 11.927	2.7095	+ .0008	.000	+15 28 50.49	3.842	.386	− .01	5	18.96
7770	BD+44° 2989		*9.31*		44 19.275	1.7796	+ .0007	− .003	+44 35 52.21	3.852	.253	− .02	5	19.95
7771	BD+10° 3663	G5	8.0	8.38	18 44 27.492	+2.8284	+ .0005	− .004	+10 33 11.12	+3.864	+ .403	+ .02	4 5	18.67 17.83
7772	BD+ 2° 3691		9.1		44 48.766	3.0193	− .0004	− .0021	+ 2 19 58.17	3.894	.431	− .010	5	19.39
7773	BD+37° 3237		8.0	8.30	44 51.992	2.0794	+ .0014	.000	+37 9 14.86	3.899	.296	− .01	4	18.02
7774	BD+23° 3459	B9	7.8	7.98	44 53.062	2.4995	+ .0013	− .001	+23 37 10.39	3.901	.356	− .01	4	18.05
7775	204 B Draconis	B5	5.76	5.96	44 55.808	1.3396	− .0009	+ .0016	+52 53 58.48	3.905	.190	− .016	4	19.15
7776	BD− 1° 3570	A0	7.9	7.76	18 45 7.591	+3.0972	− .0008	+ .0007	− 1 4 21.14	+3.921	+ .441	+ .007	4	18.28
7777	BD+19° 3796	B9	7.9	8.10	45 11.195	2.6030	+ .0011	− .001	+19 43 8.41	3.927	.372	+ .01	4	18.53
7778	BD+32° 3218		*8.75*	8.47	45 16.743	2.2257	+ .0014	− .001	+32 52 40.40	3.934	.317	+ .02	5	19.79
7779	BD−11° 4766	B8	10.1		45 33.783	3.3335	− .0022	+ .0037	−11 15 26.40	3.959	.475	+ .040	5	20.09
7780	BD+65° 1293	A0	*8.08*	8.44	45 52.21	0.1430	− .0115	+ .0041	+65 54 50.41	3.985	.019	+ .007	4	18.13
7781	BD+60° 1850		*8.65*	8.56	18 45 53.67	+0.7446	− .0051	− .0031	+60 38 25.69	+3.987	+ .105	+ .020	4	18.29
7782	BD+47° 2698		9.0	9.4	45 54.344	1.6615	+ .0005	− .001	+47 8 20.89	3.988	.236	+ .03	4	18.38
7783	Wi (1) 18^h 1064	K2	6.51	6.9	45 59.963	3.3911	− .0025	− .0001	−13 39 55.23	3.996	.483	+ .016	4	18.26
7784	30 Sagittarii	F0	6.24	5.77	46 2.021	3.6086	− .0043	− .0027	−22 15 17.43	3.999	.514	− .024	5	20.17
7785	CD−26° 13546	G5	9.2		46 14.458	3.7145	− .0051	+ .0008	−26 6 44.90	4.017	.528	− .017	4	17.95
7786	Lal 35058	K5	7.06	6.97	18 46 33.360	+2.9035	.0000	− .0011	+ 7 21 56.16	+4.044	+ .412	− .023	4	18.47
7787	Wi (2) 18^h 1344 *br.*	A2	6.95	6.9	46 41.663	2.4250	+ .0013	− .0004	+26 19 53.09	4.056	.345	+ .026	4	17.98
7788	CD−23° 14766		10.9	ft.	46 42.486	3.6343	− .0045	− .0001	−23 13 33.83	4.059	.518	− .031	4	19.23
7789	BD+17° 3739	A3	*9.40*		46 43.996	2.6549	+ .0009	+ .002	+17 42 27.85	4.059	.377	+ .06	4	18.00
7790	BD+ 0° 4033	A0	8.63	8.7	46 55.330	3.0692	− .0007	− .0003	+ 0 9 6.46	4.075	.436	− .009	4	18.02
7791	CD−27° 13296	B5	10.2		18 46 57.036	+3.7461	− .0055	− .0001	−27 14 0.36	+4.078	+ .533	− .040	4	18.64
7792	β Lyræ	*	Var.	4.12	47 7.503	2.2144	+ .0014	+ .0003	+33 16 8.65	4.093	.315	− .007	7	20.18
7793	Brad 2362	A3	6.04	5.91	47 10.100	3.1507	− .0011	+ .0001	− 3 24 44.25	4.096	.447	− .037	4	18.25
7794	BD+52° 2283	M	*9.16*		47 21.590	1.3637	− .0010	.000	+52 34 22.92	4.113	.193	.00	4	18.19
7795	BD+14° 3664	A3	*8.95*	8.4	47 23.264	2.7241	+ .0007	− .001	+14 55 29.81	4.115	.387	+ .02	4	18.02
7796	BD+41° 3159		*9.53*		18 47 28.918	+1.9328	+ .0012	− .001	+41 4 37.23	+4.123	+ .274	.00	6	19.72
7797	Lac 7899	K0	6.29	5.9	47 32.242	+3.8118	− .0062	+ .0004	−29 28 30.81	4.128	+ .542	− .053	4	16.88
7798	BD+70° 1027	F2	8.09	7.75	47 34.10	−0.5793	− .0229	+ .0030	+70 17 56.17	4.131	− .084	+ .028	4	18.28
7799	BD− 7° 4747	A0	8.5	9.1	47 49.103	+3.2353	− .0017	+ .001	− 7 5 17.06	4.152	+ .459	− .02	4	18.00
7800	BD+12° 3691	A3	8.6	8.7	48 17.397	2.7815	+ .0005	− .003	+12 33 41.25	4.193	.394	+ .01	4	18.24

7750. $6^{m}02$, $3''0$, 9°.

7752. $5^{m}37$, $2''2$, 120°.

7787. $11^{m}2$, $4''7$, 2°.

7792. B8, B2; $3^{m}4$ to $4^{m}1$.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7801	BD+67° 1097		*9.25*	9.5	18 48 19.82	−0.1721	−0.0167	−0.0021	+68 3 52.55	+4.196	−0.026	+0.024	4	18.33
7802	BD−15° 5132	G5	8.1	7.66	48 21.005	+3.4333	− .0031	− .0011	−15 25 35.55	4.198	+ .488	− .029	5	19.44
7803	BD− 4° 4603	A0	9.20	8.9	48 34.824	3.1838	− .0014	+ .0016	− 4 51 40.26	4.218	.453	+ .009	4	18.01
7804	Brad 2371	B9	5.33	5.56	48 51.339	2.5628	+ .0010	− .0010	+21 19 40.54	4.241	.364	− .013	5	17.82
7805	BD+31° 3382	B9	*8.14*	8.10	48 51.697	+2.2787	+ .0014	+ .0018	+31 17 49.26	4.241	+ .324	+ .017	4	18.12
7806	BD+78° 654		*9.45*	8.6	18 48 52.00	−3.2309	− .0928	− .0045	+78 17 38.79	+4.242	− .461	− .033	4	18.35
7807	50 Draconis	A0	5.37	5.31	48 57.78	−1.9196	− .0532	− .0036	+75 20 25.05	4.250	− .275	+ .077	8	18.39
7808	BD+38° 3329		*9.76*	9.5	49 3.715	+2.0153	+ .0012	+ .004	+38 59 57.78	4.258	+ .286	− .01	4	18.54
7809	BD+ 8° 3880	B9	8.0	8.52	49 12.040	2.8747	+ .0001	− .002	+ 8 37 31.24	4.271	.407	+ .02	5	19.41
7810	BD+ 5° 3975	K5	8.9	8.59	49 45.446	2.9501	− .0003	− .0024	+ 5 21 55.94	4.318	.418	− .033	4	18.38
7811	BD+50° 2681	A5	*9.10*	9.1	18 49 54.914	+1.4689	− .0006	− .001	+50 52 10.55	+4.331	+ .207	+ .02	4	18.62
7812	o Draconis	K0	4.85	4.7	50 1.299	0.8763	− .0046	+ .0108	+59 17 24.69	4.341	.123	+ .023	4	18.47
7813	BD+54° 2047	K2	*8.62*	8.71	50 13.657	1.2231	− .0020	.000	+54 48 26.06	4.358	.172	− .02	4	18.54
7814	σ Sagittarii	B3	2.14	2.42	50 18.362	3.7201	− .0057	+ .0006	−26 23 50.20	4.365	.528	− .066	34 32	21.95 22.31
7815	BD+26° 3385	F0	*9.5*		50 20.495	2.4333	+ .0012	+ .0004	+26 6 53.65	4.368	.345	+ .001	4	18.32
7816	BD+66° 1136		*9.85*		18 50 23.13	+0.0226	− .0146	+ .0037	+66 50 56.62	+4.372	+ .002	+ .003	4	18.61
7817	BD− 9° 4896	B8	9.1	9.5	50 24.068	3.2816	− .0022	− .001	− 9 5 55.26	4.373	.465	+ .01	5	19.36
7818	BD+48° 2784 *m.*		9.1	8.6	50 30.746	1.5767	− .0001	− .001	+48 55 22.84	4.382	.223	+ .02	4 5	19.00 18.10
7819	Cape (50) 3710	F5	5.58	5.51	50 54.562	3.4582	− .0035	− .0018	−16 28 30.06	4.416	.490	− .185	4	18.16
7820	δ^2 Lyræ	B3	5.51	5.7	50 55.854	2.0951	+ .0012	− .0006	+36 52 15.36	4.418	.296	− .009	4	18.28
7821	BD+18° 3867	K5	8.3	8.4	18 50 58.734	+2.6363	+ .0008	− .001	+18 30 47.05	+4.422	+ .373	+ .02	4	17.94
7822	CD−25° 13542 *br.*	G0	7.40	7.12	51 5.563	3.6846	− .0056	+ .0020	−25 9 0.44	4.432	.522	+ .040	5	20.00
7823	BD+40° 3519	F0	7.72	7.77	51 16.386	+1.9707	+ .0011	− .0016	+40 13 19.58	4.448	+ .278	+ .015	5	19.77
7824	BD+80° 594		*8.42*	8.84	51 27.66	−5.1274	− .1791	+ .0043	+80 58 21.44	4.463	− .731	− .010	4	18.71
7825	BD+30° 3342		*8.78*	8.8	51 32.999	+2.3137	+ .0013	− .0011	+30 13 37.52	4.471	+ .327	− .034	4	18.36
7826	BD−19° 5235	B9	9.13		18 51 52.964	+3.5420	− .0044	+ .0002	−19 49 2.53	+4.499	+ .501	+ .017	4	18.69
7827	BD+45° 2792		9.3	9.2	52 1.446	1.7377	+ .0005	+ .001	+45 42 59.72	4.511	.245	− .04	4	17.96
7828	BD+ 7° 3897	F0	*9.83*	9.4	52 7.380	2.9016	− .0002	+ .001	+ 7 29 15.96	4.520	.410	+ .01	4	18.71
7829	BD+55° 2124	M0	*8.77*	9.1	52 9.401	1.1683	− .0025	+ .004	+55 38 31.94	4.523	.164	+ .02	4	18.72
7830	BD− 0° 3599 *m.*	A2	8.0	8.1	52 10.189	3.0934	− .0011	+ .0008	− 0 54 30.72	4.524	.438	− .007	4	18.22
7831	BD−11° 4820	B9	8.9	8.4	18 52 14.463	+3.3385	− .0027	− .0003	−11 32 19.09	+4.530	+ .472	.000	4	19.03
7832	θ^1 Serpentis *n. pr.*	A5	4.50	4.54	52 14.530	2.9794	− .0005	+ .0031	+ 4 5 54.47	4.530	.422	+ .027	105 86	18.79 18.89
7833	BD+59° 1929	B5	6.94	7.33	52 38.724	0.8265	− .0055	− .002	+59 54 55.28	4.564	.115	− .01	4	18.32
7834	Brad 2375	K0	5.04	5.19	52 46.690	3.2083	− .0019	+ .0042	− 5 57 3.99	4.575	.454	− .032	4	18.55
7835	BD−21° 5200	A0	8.7	8.61	52 50.608	3.5788	− .0048	− .0001	−21 15 27.53	4.581	.506	− .047	4	18.85
7836	β Lyræ	Mb	Var.	4.30	18 52 53.984	+1.8234	+ .0007	+ .0026	+43 50 24.33	+4.586	+ .257	+ .072	4	18.61
7837	BD+65° 1304		*9.40*	9.4	52 54.79	0.2701	− .0120	− .0055	+65 6 3.54	4.587	.036	− .003	4	18.78
7838	ξ Sagittarii	K0	3.61	3.89	52 57.500	3.5776	− .0048	+ .0023	−21 12 46.67	4.591	.506	− .018	4	18.20
7839	Brad 2379	B8	5.65	5.40	53 15.207	3.0175	− .0008	− .0003	+ 2 25 45.09	4.616	.426	− .018	4	18.39
7840	BD−12° 5218	F0	8.5	8.84	53 17.016	3.3707	− .0031	+ .0007	−12 54 20.04	4.619	.476	+ .008	6	19.64
7841	BD+16° 3677	K0	8.3	7.99	18 53 31.323	+2.6845	+ .0007	.000	+16 37 28.83	+4.639	+ .379	+ .02	4	17.95
7842	BD+27° 3168	K5	9.2	8.1	53 34.503	2.3944	+ .0012	+ .0009	+27 33 15.25	4.643	.338	+ .007	4	18.27
7843	BD+22° 3535	F2	*7.86*	8.13	53 40.148	2.5289	+ .0011	− .001	+22 42 7.64	4.651	.357	.00	4	18.05
7844	BD−14° 5242	F5	8.29	8.41	54 3.611	3.4179	− .0036	+ .0011	−14 52 35.36	4.685	.483	− .030	4	18.11
7845	CD−23° 14912	K0	9.2		54 6.237	3.6293	− .0055	+ .0001	−23 11 28.33	4.688	.513	− .012	4	18.02
7846	BD+35° 3417		*9.32*	9.5	18 54 20.372	+2.1586	+ .0013	− .001	+35 8 6.51	+4.709	+ .304	− .02	4	18.05
7847	BD− 2° 4809	F2	*9.9*		54 41.695	3.1363	− .0015	− .0003	− 2 48 21.61	4.739	.442	+ .008	4	18.49
7848	Brad 2385	A3	5.94	6.36	55 6.527	2.7540	+ .0004	− .0005	+13 47 53.83	4.773	.387	− .052	4	18.06
7849	BD+25° 3683 *br.*	K5	7.91	7.78	55 14.382	2.4637	+ .0011	+ .0007	+25 8 21.07	4.785	.347	+ .016	4	18.05
7850	BD+57° 1921	K2	*8.52*	[illegible]	55 20.075	+1.0285	− .0040	+ .003	+57 35 36.95	4.791	+ .144	.00	4	18.00
7851	υ Draconis	K0	4.91	5.27	18 55 22.95	−0.7367	− .0305	+ .0110	+71 11 26.14	+4.797	− .106	+ .040	8	18.22
7852	γ Lyræ	A0	3.30	3.50	55 57.002	+2.2441	+ .0013	− .0002	+32 34 44.60	4.845	+ .316	− .007	51 50	22.36 22.54
7853	ε Aquilae	K0	4.21	4.11	55 59.472	2.7263	+ .0005	− .0044	+14 57 31.63	4.849	.383	− .077	5	19.09
7854	Grmb 2727	B5	6.12	6.20	56 9.504	1.9628	+ .0010	+ .0006	+40 34 7.66	4.863	.276	+ .007	4	17.94
7855	BD+10° 3764	F8	*9.47*		56 13.567	2.8378	.0000	− .004	+10 16 16.92	4.868	.390	− .03	4	18.04
7856	BD− 4° 4660	A0	8.5	9.12	18 56 14.240	+3.1733	− .0018	− .0009	− 4 26 14.20	+4.869	+ .447	+ .009	4	18.49
7857	BD+ 1° 3851	K0	*8.16*	8.38	56 46.710	3.0440	− .0010	− .0012	+ 1 16 11.61	4.916	.428	+ .014	5	17.58
7858	BD+ 3° 3870	G0	*9.02*	9.2	57 2.531	2.9823	− .0007	− .0001	+ 3 59 36.85	4.938	.419	+ .003	4	18.24
7859	BD+28° 3148	A	8.5	8.7	57 6.498	2.3544	+ .0013	+ .0008	+29 0 48.73	4.943	.331	+ .016	4	17.52
7860	BD+23° 3524	A2	8.0	8.72	57 16.015	2.5051	+ .0011	− .002	+23 40 11.04	4.957	.351	− .02	5	18.25

7818. $9^{m}7$ $10^{m}0$, $0''6$, 44°
7822. 14^{m}, $5''4$, 252°.

7830. $8^{m}0$ 13^{m}, $0''7$, 90°.
7832. $5^{m}37$, 22″, 104°.

7836. $4^{m}0$ to $4^{m}5$
7849. 14^{m}, $2''7$, 142°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7861	BD+37° 3306		*9.05*	8.9	18 57 17.271	+ 2.0877	+ 0.0012	−0.001	+37 15 41.79	+4.959	+0.293	+0.01	4	18.06
7862	BD−18° 5173	K0	9.4		57 28.408	3.5057	− .0047	− .0010	−18 29 31.87	4.975	.493	+ .056	4	18.01
7863	BD−17° 5427	G5	8.1	8.46	57 28.556	3.4678	− .0043	+ .0009	−16 58 13.03	4.975	.488	.000	4	18 03
7864	ζ Sagittarii *m.*	A2	2.71	2.60	57 31.398	3.8199	− .0080	− .0016	−29 59 44.51	4.978	.537	.000	5	19.42
7865	BD+ 7° 3931	F5	8.6	8.6	57 31.818	+ 2.9100	− .0004	− .003	+ 7 9 55.36	4.979	+ .408	.00	4	18.01
7866	BD+84° 426	F8	*9.17*	9.2	18 57 42.87	−10.2370	− .5818	+ .0117	+84 26 46.34	+4.995	−1.447	− .043	4	18.60
7867	BD− 8° 4821 *br.*	A0	9.1	8.5	57 49.349	+ 3.2635	− .0026	.000	− 8 23 14.76	5.004	+ .459	− .03	5	19.59
7868	BD+62° 1670	K5	*8.16*	8.32	57 55.84	0.5645	− .0094	+ .002	+62 42 46.49	5.013	.077	+ .02	5	19.60
7869	CD−27° 13487	A0	8.7		58 0.795	+ 3.7453	− .0071	− .0012	−27 28 11.18	5.020	+ .526	− .004	6	17.37
7870	BD+68° 1037		*8.17*	7.47	58 11.21	− 0.1934	− .0212	+ .0043	+68 23 39.50	5.035	− .029	− .007	4	17.96
7871	BD+33° 3292		*8.98*	9.1	18 58 27.356	+ 2.2075	+ .0012	+ .001	+33 47 10.60	+5.058	+ .309	+ .02	4	18.20
7872	CD−29° 15649	A0	8.9		58 28.834	3.8112	− .0080	.0000	−29 43 52.17	5.059	.536	− .010	4	18.07
7873	BD+42° 3223	F5	8.6	8.70	58 46.746	1.8978	+ .0008	− .002	+42 16 6.85	5.084	.265	− .02	4	18.78
7874	CD−25° 13678	G5	9.7		58 48.322	3.6833	− .0066	+ .0001	−25 17 1.58	5.087	+ .517	− .053	5	18.55
7875	λ Urs Min	Mb	6.55		59 2.35	−72.603	−21.472	− .112	+89 1 18.11	5.107	−10.233	+ .007	105 99	19.78 19.97
7876	BD+51° 2479	K5	*8.80*	8.9	18 59 4.186	+ 1.4646	− .0012	+ .001	+51 12 56.90	+5.110	+ .204	− .01	6	19.05
7877	Lac 7976	A0	5.53	5.01	59 16.956	3.8540	− .0087	+ .0003	−31 9 55.34	5.127	.542	− .028	4	19.29
7878	Wi (2) 18^h 1757	K0	6.25	6.28	59 23.370	2.6142	+ .0008	− .0005	+19 32 37.23	5.136	.366	− .010	4	18.12
7879	Lal 35530 *br.*	A0	6.98	7.0	59 24.644	3.6214	− .0060	− .0005	−23 0 54.33	5.138	.508	+ .008	4	18.63
7880	BD−21° 5231	K0	8.9	8.49	59 25.028	3.5665	− .0055	− .0001	−20 55 10.10	5.139	.500	− .016	4	18.37
7881	BD+11° 3711	F2	*9.60*		18 59 43.508	+ 2.8061	+ .0001	+ .003	+11 40 2.20	+5.165	+ .393	+ .04	4	18.34
7882	BD+52° 2323	K	*9.74*		18 59 57.012	1.3787	− .0017	− .002	+52 41 29.99	5.184	.192	+ .06	5	19.69
7883	BD− 0° 3638	K0	8.1	7.84	19 0 7.693	3.0873	− .0015	− .0023	− 0 38 52.72	5.199	.433	− .053	4	17.98
7884	BD+48° 2819	K	*8.96*	9.3	0 10.118	1.6032	− .0004	+ .006	+48 42 37.55	5.202	.223	+ .07	4	18.39
7885	BD+20° 4032	A0	8.90	8.9	0 14.514	+ 2.5994	+ .0008	− .003	+20 8 35.39	5.209	+ .364	.00	4	17.98
7886	BD+70° 1039	K0	*7.91*	7.76	19 0 16.70	− 0.5880	− .0303	− .0014	+70 34 57.77	+5.212	− .085	− .014	5	19.80
7887	BD+29° 3460	A0	*9.28*	9.2	0 57.156	+ 2.3269	+ .0012	+ .0015	+30 2 51.81	5.269	+ .326	− .008	4	17.97
7888	BD+39° 3630	K5	7.97	7.68	1 22.417	1.9915	+ .0010	− .0026	+39 59 47.03	5.304	.278	− .020	6	19.07
7889	BD−11° 4869	K5	9.1		1 25.457	3.3211	− .0034	− .0015	−10 54 31.79	5.308	.465	− .047	4	18.46
7890	BD+ 5° 4026	G5	*9.26*		1 27.070	2.9365	− .0006	− .005	+ 6 1 56.91	5.311	.410	− .01	4	18.55
7891	BD+24° 3624	F0	8.6	9.11	19 1 34.496	+ 2.4775	+ .0011	− .0006	+24 47 43.03	+5.322	+ .346	− .030	4	18.57
7892	ζ Aquilæ *br.*	A0	3.02	3.26	1 43.965	2.7577	+ .0002	− .0006	+13 44 37.03	5.334	.385	− .102	125 89	20.01 20.27
7893	τ Sagittarii	K0	3.42	3.49	1 56.820	3.7514	− .0078	− .0045	−27 47 19.07	5.352	.525	− .260	5 4	20.43 21.85
7894	λ Aquilæ	B9	3.55	3.85	2 0.225	3.1855	− .0023	− .0017	− 5 0 12.91	5.357	.445	− .090	4	18.80
7895	Grmb 2759	B9	6.82	7.2	2 12.944	1.7489	+ .0002	+ .0023	+45 47 58.83	5.375	.243	+ .010	4	18.79
7896	BD+14° 3782	B9	8.94		19 2 25.610	+ 2.7261	+ .0003	.000	+15 4 18.36	+5.393	+ .381	− .02	5	18.77
7897	Lal 35719	B8	6.72	6.86	2 26.675	3.1057	− .0017	+ .0007	− 1 28 10.51	5.394	.434	− .007	4	18.26
7898	BD−15° 5233	G5	9.8	8.8	2 27.105	+ 3.4233	− .0043	− .0022	−15 14 15.91	5.395	+ .479	+ .001	4	18.40
7899	Schwerd 1139	A0	6.83	7.10	2 33.85	− 6.3923	− .3028	+ .0089	+82 15 27.04	5.404	− .899	+ .023	8	19.13
7900	BD−13° 5233	G5	8.5	8.3	2 53.990	+ 3.3690	− .0039	+ .0035	−12 58 8.18	5.433	+ .471	+ .006	4	18.32
7901	Brad 2416	A0	5.35	5.5	19 3 7.304	+ 1.3491	− .0021	− .0006	+53 16 23.83	+5.451	+ .187	+ .021	4	18.12
7902	Pi 18^h 318	A5	5.46	5.4	3 27.203	+ 2.3747	+ .0012	+ .0054	+28 30 7.31	5.479	+ .330	+ .068	4	18.04
7903	BD+79° 610		*8.55*	8.46	3 36.01	− 3.7106	− .1461	+ .0053	+79 16 17.13	5.492	− .523	− .018	4	18.15
7904	CD−25° 13774	K2	9.4	8.4	4 22.151	+ 3.6781	− .0073	− .0015	−25 14 36.67	5.557	+ .513	− .009	5	19.41
7905	17 Lyræ *br.*	F0	5.07	5.32	4 23.934	2.2587	+ .0012	+ .0095	+32 22 29.55	5.559	.314	+ .013	5	18.01
7906	BD+53° 2182	A5	*8.97*	8.6	19 4 25.655	+ 1.3266	− .0024	+ .001	+53 40 22.28	+5.561	+ .183	+ .04	4	18.05
7907	ι Lyræ	B5	5.13	5.22	4 26.749	2.1408	+ .0012	− .0006	+35 58 26.46	5.563	.298	− .006	5 4	17.14 18.02
7908	BD+ 9° 3998	K2	8.3	8.06	4 56.692	2.8640	− .0003	− .005	+ 9 14 20.99	5.605	.399	+ .03	4	18.01
7909	BD− 6° 5046	A2	8.7	8.8	4 57.672	3.2117	− .0026	.000	− 6 11 0.56	5.606	.448	+ .03	4	18.04
7910	BD− 5° 4889	G0	10.15		4 58.482	3.1842	− .0024	+ .0005	− 4 57 51.29	5.607	.444	+ .018	4	18.80
7911	π Sagittarii	F2	3.02	2.99	19 5 0.418	+ 3.5691	− .0061	− .0004	−21 9 7.08	+5.610	+ .497	− .040	4	18.52
7912	Brad 2410	F2	5.37	5.40	5 4.792	2.9391	− .0008	− .0010	+ 5 56 47.45	5.616	.408	− .074	5	19.28
7913	BD− 8° 4865		10.0		5 11.606	3.2666	− .0032	.000	− 8 35 39.87	5.625	.455	− .02	4	18.62
7914	BD−16° 5178	A5	8.8	8.9	5 16.956	3.4592	− .0050	− .0016	−16 46 20.87	5.633	.481	.000	5	18.38
7915	BD+57° 1946	K2	*9.40*	8.88	5 22.752	1.0703	− .0048	− .003	+57 21 53.56	5.641	.148	.00	5 6	20.17 19.22
7916	BD+ 5° 4045		10.5	ft.	19 5 25.829	+ 2.9583	− .0009	− .0041	+ 5 5 57.31	+5.645	+ .411	+ .007	5 7	20.37 20.08
7917	BD+11° 3751 *m.*	A0	*8.51*	8.40	5 28.637	2.8063	.0000	− .001	+11 44 18.97	5.649	.390	.00	4	17.55
7918	BD+ 1° 3911	G5	8.74	9.21	5 38.405	3.0479	− .0015	− .0010	+ 1 6 29.48	5.663	.424	− .147	4	18.61
7919	BD+49° 2940	F5	7.9	7.58	5 40.511	1.5794	− .0007	− .002	+49 21 24.13	5.666	.220	+ .05	4	18.20
7920	BD− 0° 3662	B8	6.39	6.39	5 44.758	3.0852	− .0018	− .0002	− 0 33 28.11	5.672	.429	− .007	4	18.46

7864. $3^{m}4$ $3^{m}6$, 0″4, 88°; 21 yrs.
7867. $12^{m}3$, 2″7, 249°.

7879. $8^{m}3$, 7″9, 308°.
7892. 12^{m}, 5″7, 57°.

7905. $9^{m}2$, 3″9, 313°.
7917. $9^{m}1$-$9^{m}1$, 1″2, 24°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7921	CD−29° 15798	K0	8.2	8.1	19 5 49.925	+3.7828	−0.0089	+0.0048	−28 59 25.34	+5.678	+0.526	−0.029	5	19.89
7922	BD+20° 4062	G5	9.20	9.31	6 5.647	2.6032	+ .0007	− .002	+20 7 38.31	5.701	.361	.00	4	18.62
7923	BD+32° 3335	K0	*7.59*	7.60	6 18.031	2.2492	+ .0012	.000	+32 44 22.26	5.718	.312	− .03	4	17.98
7924	BD+34° 3442	Ma	8.92	8.33	6 23.478	2.1741	+ .0012	.000	+35 3 19.41	5.726	.301	− .01	4	18.06
7925	BD+17° 3873	F8	*9.71*		6 24.729	2.6694	+ .0004	− .002	+17 28 53.59	5.728	.370	− .02	5	19.83
7926	BD+ 3° 3928	K5	*8.51*	8.43	19 6 33.095	+2.9984	− .0012	− .0027	+ 3 19 19.39	+5.739	+ .417	− .030	4	18.02
7927	BD−18° 5238	A0	9.3		6 36.938	3.4988	− .0056	+ .002	−18 24 23.22	5.744	.486	+ .19	4	19.82
7928	BD+27° 3260	G0	*9.16*	9.3	6 42.080	2.3992	+ .0011	+ .0006	+27 45 0.77	5.752	.333	.000	4	17.99
7929	BD+55° 2154	F8	*9.95*		7 1.384	1.2187	− .0035	+ .004	+55 23 12.90	5.779	.168	− .01	4	18.63
7930	BD+22° 3613	K0	*8.4*	7.98	7 8.046	2,5403	+ .0009	+ .002	+22 35 42.97	5.788	.352	.00	6	18.57
7931	BD+64° 1330	K0	*8.05*	8.01	19 7 35.43	+0.4215	− .0137	+ .0014	+64 15 9.29	+5.826	+ .056	− .024	4	18.00
7932	BD+44° 3073	A5	7.17	7.37	7 46.256	+1.8197	+ .0003	.000	+44 25 40.47	5.842	+ .251	.00	4	17.98
7933	BD+75° 688		*9.22*		7 57.92	−1.9878	− .0789	− .0044	+75 49 35.21	5.857	− .280	− .007	4	18.03
7934	BD+50° 2736	F5	*9.77*		7 59.936	+1.5336	− .0011	+ .001	+50 17 47.06	5.860	+ .212	− .01	4	18.02
7935	Pi 19^{h} 7	K0	5.86	5.36	8 18.153	3.6969	− .0080	− .0015	−26 2 31.48	5.886	.513	− .006	5	19.42
7936	20 Aquilæ	B3	5.37	5.40	19 8 20.376	+3.2539	− .0032	+ .0005	− 8 4 28.01	+5.889	+ .451	− .016	4	17.62
7937	19 Lyræ	A0	5.77	6.15	8 41.843	2.3010	+ .0012	− .0009	+31 8 56.91	5.919	.319	− .007	4	18.73
7938	Paris 25568	K0	5.62	5.54	8 47.228	3.3538	− .0043	+ .0009	−12 25 4.20	5.926	.464	− .033	4	17.44
7939	BD+33° 3358		*9.12*	9.2	8 49.479	2.2171	+ .0011	+ .002	+33 49 57.49	5.929	.307	− .02	4	17.64
7940	BD−10° 4994	F8	8.7	7.93	9 11.264	+3.3088	− .0038	.0000	−10 29 9.21	5.960	+ .458	+ .012	4	18.07
7941	BD+76° 715		*9.02*	8.83	19 9 15.60	−2.4772	− .1005	− .0021	+77 3 14.65	+5.966	− .347	− .046	4	18.07
7942	BD−22° 5021	A0	6.92	6.79	9 21.428	+3.5932	− .0070	+ .002	−22 11 51.17	5.974	+ .498	+ .01	4	17.99
7943	BD+46° 2640	K	*9.17*	8.6	9 25.501	1.7276	− .0001	.000	+46 31 15.77	5.980	.238	− .05	4	18.07
7944	BD+62° 1687		*8.82*		9 26.14	0.6333	− .0108	.000	+62 23 47.69	5.981	.085	.00	4	18.30
7945	55 Draconis	A2	6.19	6.16	9 28.00	0.2288	− .0175	+ .0002	+65 50 40.37	5.983	.029	+ .029	4	18.71
7946	BD+37° 3372		*9.65*		19 9 37.703	+2.0926	+ .0010	+ .001	+37 32 52.99	+5.996	+ .289	+ .01	5 4	18.98 18.80
7947	BD− 2° 4897	B9	8.5	8.4	9 38.434	3.1166	− .0022	+ .0003	− 1 58 19.79	5.997	.431	+ .006	4	18.02
7948	21 Aquilæ	B8	5.10	5.4	9 40.675	3.0247	− .0015	− .0002	+ 2 9 23.98	6.001	.418	− .006	4	18.75
7949	BD+42° 3275		*9.50*	9.5	9 54.504	1.9195	+ .0007	− .002	+42 8 14.50	6.020	.265	+ .01	4	18.33
7950	BD−20° 5459	F0	9.13		9 58.195	3.5379	− .0063	+ .0003	−20 3 5.74	6.025	.490	+ .014	5	18.48
7951	BD+26° 3488	A5	*8.9*	8.7	19 10 3.956	+2.4438	+ .0010	+ .0015	+26 16 4.86	+6.033	+ .337	.000	4	18.30
7952	BD+ 7° 4000	A2	7.6	7.39	10 7.110	2.9077	− .0008	− .002	+ 7 22 46.12	6.037	.401	+ .02	5 4	17.55 18.01
7953	Brad 2433	K0	5.24	5.33	10 9.811	1.1313	− .0047	+ .0047	+56 43 21.19	6.041	.155	+ .040	5	19.81
7954	BD+23° 3597	G0	*9.5*		10 20.314	2.5169	+ .0009	− .001	+23 34 17.16	6.056	.347	+ .06	4	18.99
7955	ψ Sagittarii m.	F5	4.93	4.7	10 38.190	3.6772	− .0082	+ .0030	−25 23 44.39	6.081	.508	− .035	5	19.63
7956	BD+47° 2783		*9.29*	9.13	19 10 41.773	+1.6603	− .0005	+ .001	+47 57 55.62	+6.086	+ .228	+ .04	5	20.22
7957	BD+68° 1048	K0	*9.17*	9.4	10 46.23	−0.1019	− .0247	+ .0016	+68 8 50.10	6.092	− .017	+ .028	5	19.59
7958	BD+15° 3739	A0	8.29	8.43	10 53.720	+2.7261	+ .0001	− .001	+15 13 48.25	6.102	+ .376	+ .01	4	18.05
7959	BD− 4° 4737	A5	8.6	8.4	10 59.093	3.1641	− .0026	+ .0010	− 4 6 21.84	6.110	.437	− .009	4	18.30
7960	BD+43° 3187	F2	*8.54*	8.28	11 5.146	1.8503	+ .0004	+ .002	+43 50 58.03	6.118	.254	+ .02	5	19.65
7961	BD+12° 3858	K5	*9.17*		19 11 10.602	+2.7943	− .0002	− .002	+12 20 29.29	+6.125	+ .385	− .01	4	18.05
7962	BD+30° 3479	A0	7.76	7.92	11 14.415	2.3319	+ .0011	+ .0022	+30 12 41.90	6.131	.321	− .006	5	18.63
7963	BD+ 3° 3953	B8	*9.51*		11 19.871	3.0030	− .0015	− .0004	+ 3 8 12.01	6.139	.415	− .022	4	18.39
7964	BD+19° 3955	A	8.5	8.5	11 22.134	2.6234	+ .0005	− .001	+19 27 14.52	6.142	.361	− .02	4	18.37
7965	Brad 2425	A3	5.62	5.90	11 50.462	2.5824	+ .0007	+ .0030	+21 5 29.31	6.181	.356	+ .011	5 6	19.98 19.06
7966	BD− 5° 4922	B9	9.3		19 12 0.785	+3.2037	− .0033	+ .002	− 5 53 10.78	+6.195	+ .442	− .06	4	18.83
7967	BD+51° 2539	K0	*9.27*	8.9	12 6.646	1.4892	− .0016	.000	+51 15 14.55	6.204	.204	.00	4	18.41
7968	BD+48° 2858	A0	7.22	7.40	12 15.698	1.6327	− .0007	.0000	+48 34 46.93	6.216	.224	− .020	4	18.30
7969	BD+60° 1911		*9.68*	9.4	12 23.21	0.8396	− .0084	− .004	+60 22 4.54	6.227	.114	− .02	4	18.63
7970	BD+28° 3260	G0	*7.93*	7.92	12 28.467	2.3692	+ .0011	− .0003	+28 58 57.11	6.234	+ .326	− .071	5	19.56
7971	δ Draconis	K0	3.24	3.44	19 12 32.32	+0.0036	− .0231	+ .0173	+67 31 15.24	+6.239	− .002	+ .069	12	19.13
7972	22 Aquilæ	A2	5.40	5.72	12 33.450	2.9885	− .0012	+ .0006	+ 4 41 34.10	6.241	+ .409	− .014	4	18.71
7973	BD+40° 3640		8.9	8.60	12 39.403	1.9872	+ .0009	− .003	+40 31 38.84	6.249	.274	− .03	4	18.64
7974	BD−16° 5249	K0	7.70	7.43	12 48.641	3.4419	− .0056	− .0003	−16 12 58.62	6.262	.474	− .015	4	18.80
7975	BD−14° 5371	B9	8.3	8.7	12 55.864	3.4044	− .0051	− .0001	−14 38 41.49	6.271	.468	+ .024	4	18.46
7976	d Sagittarii	K0	5.03	5.00	19 12 57.343	+3.5121	− .0063	− .0009	−19 5 47.21	+6.274	+ .483	− .019	4	19.30
7977	CD−25° 13911	A3	8.8	8.3	13 8.744	3.6702	− .0084	.0000	−25 12 58.21	6.289	.506	− .020	5	19.79
7978	θ Lyræ	K0	4.46	4.67	13 35.403	2.0823	+ .0010	− .0009	+37 59 25.80	6.326	.285	− .003	4	19.02
7979	BD+ 8° 4034	A0	8.9	8.95	13 50.246	2.8840	− .0006	− .001	+ 8 28 10.21	6.347	.390	+ .02	5	17.69
7980	CD−28° 15649	K2	8.6	8.28	13 51.916	3.7574	− .0008	− .0014	−28 22 33.46	6.349	.517	− .012	4	18.67

7955. 5m5-6m0, 0″2, 113°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
7981	BD+ 9° 4051 .... *m.*	A0	9.37		19 13 53.124	+2.8468	−0.0005	−0.001	+10 6 18.54	+ 6.351	+0.391	+0.03	4	17.97
7982	ω Aquilæ	A5	5.14	5.09	14 3.659	2.8161	− .0004	− .0001	+11 27 0.67	6.366	.386	+ .011	101 79	19.41 19.53
7983	BD+56° 2219 ...... *br.*	K0	*8.42*	8.28	14 24.994	1.1743	− .0046	.000	+56 17 28.56	6.395	.160	+ .02	4	18.05
7984	BD− 8° 4929	A0	8.6	9.4	14 28.412	3.2560	− .0037	.000	− 8 14 11.89	6.400	.447	− .01	4	18.11
7985	BD+25° 3780	G	8.36	8.05	14 34.556	+2.4764	+ .0009	+ .0145	+25 13 8.32	6.408	+ .339	+ .226	4	18.05
7986	BD+69° 1038		*9.30*	8.8	19 15 3.91	−0.3187	− .0318	− .0032	+69 32 24.73	+6.448	− .047	− .030	4	18.14
7987	BD+73° 855		*9.17*	8.93	15 7.55	−1.3397	− .0630	− .0269	+74 0 3.08	6.454	− .188	+ .110	4	18.04
7988	BD+ 1° 3964	A5	8.6	8.60	15 7.896	+3.0266	− .0018	− .0007	+ 2 5 8.76	6.454	+ .415	− .026	4	18.48
7989	κ Cygni	K0	3.98	3.98	15 15.218	1.3806	− .0027	+ .0071	+53 13 13.28	6.464	.188	+ .117	4	18.82
7990	BD+18° 4029	K0	8.5	8.7	15 32.129	2.6467	+ .0005	+ .002	+18 37 14.77	6.488	.362	.00	4	18.38
7991	BD− 0° 3705	B9	8.7	8.61	19 15 36.210	+3.0771	− .0022	.0000	− 0 11 51.97	+6.493	+ .422	+ .020	4	18.13
7992	BD− 9° 5094	F0	7.46	7.21	15 39.537	3.2856	− .0041	.000	− 9 33 35.64	6.498	.450	.00	5	19.83
7993	BD+34° 3494	A3	8.27	8.38	15 46.077	2.1853	+ .0011	+ .001	+35 4 13.29	6.507	.299	− .01	4	18.61
7994	BD+23° 3625	B3	7.50	7.40	15 53.463	2.5322	+ .0008	.000	+23 9 22.93	6.517	.346	+ .01	4	18.32
7995	BD+26° 3521	A2	7.36	7.20	15 55.814	2.4348	+ .0010	+ .0021	+26 47 4.10	6.520	.333	− .005	4	18 46
7996	BD− 1° 3711	B8	8.52	8.46	19 15 56.267	+3.1112	− .0023	.0000	− 1 44 42.01	+6.521	+ .426	− .009	5	20.16
7997	CD−25° 13959	A0	9.8		16 10.875	3.6817	− .0088	+ .0007	−25 44 21.86	6.541	.505	− .037	6 7	19.57 18.84
7998	Lal 36478	A0	6.19	6.15	16 12.118	2.1105	+ .0011	+ .0043	+37 17 49.07	6.543	.289	+ .009	4	18.03
7999	CD−23° 15307	K0	7.9	7.78	16 14.393	3.6290	− .0082	− .0039	−23 46 7.71	6.546	.497	− .015	5	20.17
8000	Brad 2435	G5	5.10	4.92	16 16.662	3.1958	− .0032	+ .0069	− 5 33 58.75	6.549	.438	+ .039	4	18.31
8001	159 B Lyræ	A0	6.70	6.98	19 16 17.592	+2.0050	+ .0008	− .0003	+40 12 43.87	+6.550	+ .274	+ .009	5	20.28
8002	BD+ 0° 4177	F0	9.04	8.9	16 22.085	3.0490	− .0020	+ .0006	+ 1 4 33.35	6.556	.418	− .007	4	18.38
8003	BD+49° 2976	K5	7.62	7.07	16 25.062	1.5636	− .0013	.000	+50 4 47.82	6.561	.212	− .01	4	18.64
8004	BD−12° 5354	F2	8.8	8.7	16 35.028	3.3507	− .0048	+ .0013	−12 25 8.90	6.574	.459	.000	5	19.60
8005	BD−20° 5508	K2	9.18		16 41.493	3.5330	− .0070	+ .0022	−20 2 5.86	6.583	.483	− .015	5	19.67
8006	BD+51° 2552	K0	*7.87*	7.58	19 16 44.623	+1.4515	− .0021	+ .003	+52 5 57.12	+6.587	+ .197	+ .03	4	18.55
8007	τ Draconis	K0	4.63	4.82	17 6.02	−1.1073	− .0566	− .0321	+73 12 26.25	6.617	− .155	+ .109	8	18.52
8008	υ Sagittarii	*	4.58	4.69	17 8.789	+3.4369	− .0059	− .0002	−16 6 22.45	6.620	+ .470	− .004	4	19.13
8009	BD+59° 1999	A7	*9.67*	8.93	17 17.135	0.9520	− .0076	− .005	+59 15 45.89	6.632	.128	− .01	4	18.07
8010	BD+ 7° 4035	K0	8.5	8.40	17 17.326	2.9148	− .0010	.000	+ 7 8 12.31	6.633	.398	− .01	4	18.51
8011	BD+32° 3397		*8.55*	8.70	19 17 48.830	+2.2689	+ .0012	.000	+32 32 2.78	+6.676	+ .309	− .01	5	19.64
8012	BD+71° 944		*9.20*		17 50.40	−0.6367	− .0420	+ .0077	+71 14 18.07	6.678	− .090	+ .045	4	18.12
8013	BD+45° 2877	K	*8.49*	8.72	18 2.196	+1.7934	.0000	− .018	+45 26 36.91	6.694	+ .243	.00	5	19.48
8014	BD− 3° 4572	B9	8.9	8.6	18 13.116	3.1561	− .0030	+ .0007	− 3 47 12.41	6.709	.430	+ .003	4	18.09
8015	BD+38° 3550	F8	*8.16*	8.28	18 13.638	2.0661	+ .0009	+ .001	+38 38 15.67	6.709	.281	+ .01	4	18.56
8016	BD+13° 3995	F0	9.1	9.1	19 18 23.705	+2.7643	− .0002	− .001	+13 45 46.13	+6.723	+ .377	.00	4	18.56
8017	Lac 8090	K0	6.94		18 33.841	3.9580	− .0138	+ .0022	−35 7 17.46	6.738	.541	− .010	4	19.35
8018	BD+11°3813	G5	*9.6*	9.4	18 34.394	2.8199	− .0005	+ .004	+11 21 21.93	6.738	.384	+ .03	4	18.16
8019	BD+16° 3829	B9	8.4	8.6	18 36.838	2.6997	+ .0002	.000	+16 30 34.11	6.742	.368	.00	[illegible]	18.41
8020	BD+27° 3358	F2	9.24		18 37.192	2.4166	+ .0010	− .0035	+27 32 4.47	6.742	.329	− .057	4	18.67
8021	BD+64° 1344	B9	6.33	6.84	19 19 9.28	+0.4670	− .0158	+ .0015	+64 14 21.23	+6.786	+ .061	+ .010	[illegible]	18.32
8022	BD− 7° 4949		10.0		20 6.241	3.2316	− .0038	+ .001	− 7 12 39.71	6.864	.440	− .01	4	18.35
8023	π Draconis	A2	4.63	4.97	20 15.65	0.3107	− .0191	+ .0031	+65 33 37.35	6.877	.040	+ .041	4	18.40
8024	BD−17° 5617	F8	9.1		20 21.228	3.4723	− .0066	+ .0002	−17 39 40.57	6.885	.473	− .037	4	17.93
8025	BD−16° 5303		9.3	8.8	20 39.956	3.4340	− .0062	+ .003	−16 4 1.20	6.911	.466	+ .06	4	18.07
8026	Brus 8113	K0	5.81	6.0	19 20 50.468	+3.3867	− .0056	+ .0048	−14 3 23.93	+6.925	+ .460	+ .050	4	18.50
8027	Brad 2456	B3	4.86	5.10	20 58.272	2.3644	+ .0011	+ .0007	+29 27 50.99	6.936	.321	+ .010	4	17.98
8028	*b* Aquilæ	G5	5.23	5.17	21 9.226	2.8115	− .0005	+ .0493	+11 46 18.94	6.951	.381	+ .632	4	17.98
8029	BD+21° 3769	G5	*7.83*	7.88	21 15.778	2.5652	+ .0007	+ .0106	+22 2 44.49	6.960	.348	− .067	5	17.90
8030	δ Aquilæ	F0	3.44	3.48	21 27.878	3.0081	− .0018	+ .0169	+ 2 57 15.23	6.976	.408	+ .077	133 113	19.26 19.52
8031	Brad 2448	K0	5.56	5.84	19 21 32.987	+3.5772	− .0082	+ .0018	−21 56 10.05	+6.983	+ .486	+ .001	5	19.61
8032	BD+54° 2136	K5	*8.92*	9.3	21 44.714	+1.3123	− .0038	− .001	+54 34 28.34	6.999	+ .176	+ .01	4	17.57
8033	BD+68° 1058		*8.95*	8.7	21 50.22	−0.1730	− .0310	− .0013	+68 54 18.96	7.006	− .027	− .023	4	18.05
8034	186 G Sagittarii	B9	5.68	6.03	21 53.243	+3.7927	− .0116	+ .0009	−29 54 8.70	7.011	+ .515	− .055	[illegible]	18.36
8035	21 B Vulpeculæ	F8	6.17	5.78	22 7.077	2.4953	+ .0009	− .0136	+24 46 3.13	7.030	.338	− .631	5	20.02
8036	BD+ 8° 4094	A0	9.0	8.7	19 22 9.017	+2.8926	− .0011	− .001	+ 8 11 30.29	+7.032	+ .301	+ .01	4	17.99
8037	BD+12° 3904	A2	7.7	8.14	22 23.056	2.7968	− .0005	− .002	+12 26 18.43	7.052	.379	− .01	4	17.99
8038	BD+17° 3971	A2	*8.9*	9.29	22 55.824	2.6866	+ .0001	− .001	+17 10 9.15	7.096	.363	− .01	4	17.57
8039	CD−28° 15837	K5	8.4	8.31	22 58.189	3.7587	− .0108	+ .0003	−28 45 52.40	7.099	.511	− .010	4	18.05
8040	Brad 2462	K5	6.04	5.88	22 58.643	2.6245	+ .0005	− .0012	+19 43 53.84	7.100	.355	− .054	4	18.37

7981. $9^{m}7$-$10^{m}7$, $1''1$, 106°.

7983. $12^{m}7$, $3''1$, 57°.

8008. B8p, F2p.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8041	BD+30° 3560		*9.60*		19 23 7.592	+ 2.3212	+0.0011	+0.0016	+31 1 31.34	+7.112	+0.313	+0.018	5 6	19.93 19.02
8042	BD+14° 3917	M0	*8.93*	8.33	23 15.989	2.7393	− .0001	− .004	+14 56 35.89	7.123	.370	+ .01	5	19.63
8043	4 Cygni	A0	5.15	5.5	23 16.182	2.1599	+ .0011	+ .0005	+36 9 24.23	7.124	.291	+ .006	4	19.04
8044	BD+53° 2239	F5	*9.75*		23 25.806	1.3986	− .0031	+ .001	+53 16 44.51	7.137	.187	− .01	5	19.56
8045	Grmb 2844	G5	6.72	6.80	23 30.142	1.8340	+ .0001	− .0047	+44 46 18.05	7.143	.246	− .081	4	17.60
8046	BD− 9° 5141	G5	8.9	8.40	19 23 40.408	+ 3.2836	− .0046	.000	− 9 35 18.30	+7.158	+ .444	+ .02	4	18.01
8047	BD+ 3° 4028	A0	*8.84*	8.47	23 48.355	2.9941	− .0018	− .0023	+ 3 36 10.73	7.168	.404	− .006	5	19.66
8048	BD− 3° 4598 *br.*	A0	8.7		23 58.842	3.1428	− .0031	− .0008	− 3 12 56.91	7.182	.425	+ .011	4	19.06
8049	BD+23° 3660	K0	*9.52*		24 4.420	+ 2.5302	+ .0008	− .006	+23 30 16.70	7.189	+ .341	− .04	4	18.36
8050	Rad (45) 4348	Nb	Var	6.02	24 25.58	− 2.0812	− .1049	− .0021	+76 24 6.11	7.218	− .286	.000	8	18.19
8051	BD+36° 3564		*8.45*	8.45	19 24 43.262	+ 2.1353	+ .0010	+ .002	+36 57 14.94	+7.242	+ .287	+ .03	4	18.42
8052	BD+33° 3463	F0	7.38	7.62	24 52.507	2.2572	+ .0012	.0000	+33 12 38.25	7.255	.304	− .042	4	18.07
8053	Pi 19^{h} 126 *br.*	K0	5.60	5.54	24 55.411	2.7115	− .0107	+ .0010	−27 9 1.50	7.259	.502	− .048	4	18.47
8054	BD− 1° 3753	K2	7.9	7.71	25 10.503	3.1063	− .0029	+ .0015	− 1 32 48.90	7.279	.419	+ .013	4	18.00
8055	Lal 36813	K2	6.52	6.15	25 12.312	3.0710	− .0026	− .0001	+ 0 4 50.83	7.282	.414	− .022	4	18.58
8056	6 Vulpeculæ	Ma	4.63	4.58	19 25 22.542	+ 2.5054	+ .0009	− .0093	+24 30 7.72	+7.296	+ .337	− .113	4	18.60
8057	BD−11° 5015	K0	8.7	8.5	25 23.414	3.3191	− .0052	+ .0006	−11 11 46.61	7.297	.448	.000	4	18.63
8058	BD−22° 5124	G0	9.2		25 23.433	+ 3.5792	− .0085	+ .0010	−22 8 39.47	7.297	+ .483	− .022	5	18.50
8059	Carr 2965	A2	6.34	6.71	25 27.38	− 7.5367	− .5456	+ .0016	+83 18 34.50	7.302	−1.026	− .003	8	19.02
8060	BD+47° 2837	K0	7.64	7.60	25 27.921	+ 1.7207	− .0006	− .002	+47 22 18.04	7.303	+ .231	+ .05	4	18.68
8061	BD−19° 5482	Ma	8.3	7.55	19 25 28.554	+ 3.5147	− .0078	+ .0015	−19 33 7.90	+7.304	+ .474	− .005	4	18.58
8062	Oelt 19296	K5	6.46	6.46	25 31.05	0.6931	− .0130	+ .0031	+62 23 34.91	7.307	.091	+ .037	4	18.16
8063	BD+50° 2799	F8	*8.40*	8.67	25 44.306	1.5598	− .0017	+ .004	+50 34 21.05	7.325	.208	− .02	4	18.67
8064	BD+40° 3745	A	*8.65*	8.9	25 59.084	1.9906	+ .0007	+ .003	+41 1 58.67	7.345	.268	− .03	4	18.49
8065	BD+24° 3764	B9	*9.36*	9.4	26 23.471	2.4917	+ .0009	− .0002	+25 3 40.40	7.378	.335	− .017	5	19.60
8066	BD−13° 5385	G5	8.1	8.1	19 26 27.487	+ 3.3721	− .0059	− .0002	−13 32 58.84	+7.384	+ .454	− .038	4	18.12
8067	ε Aquilæ	Ma	5.22	5.44	26 28.836	+ 3.1369	− .0032	+ .0006	− 2 57 23.79	7.386	+ .422	− .013	4 3	19.28 17.91
8068	225 B Draconis	A2	6.00	6.44	26 33.34	− 3.5928	− .1970	+ .0093	+79 26 36.89	7.392	− .490	− .037	8	19.26
8069	BD+39° 3784		8.6	8.28	27 4.602	+ 2.0462	+ .0008	.000	+39 35 46.18	7.434	+ .274	− .02	4	18.57
8070	CD−23° 15506	K0	9.0	8.48	27 9.190	3.6186	− .0095	+ .0003	−23 44 44.50	7.441	.487	− .010	4 5	18.51 17.71
8071	BD+16° 3879	F8	8.7	8.42	19 27 14.576	+ 2.6912	+ .0001	+ .004	+17 5 31.19	+7.447	+ .361	.00	5	19.42
8072	Lal 36978	K0	6.64	6.68	27 17.237	2.2497	+ .0011	− .0001	+33 33 38.56	7.452	.301	− .027	4	18.22
8073	BD+ 9° 4129	K2	9.24	9.17	27 25.636	2.8534	− .0009	− .003	+10 1 38.37	7.463	.383	+ .02	3	17.18
8074	β^1 Cygni *br.*	•	3.24	3.13	27 29.666	2.4191	+ .0010	− .0002	+27 47 26.99	7.468	.324	− .009	118 108	19.51 19.52
8075	ι Cygni	A2	3.94	3.7	27 41.287	1.5109	− .0022	+ .0021	+51 33 31.49	7.484	.201	+ .124	4	18.82
8076	CD−27° 14045	K2	9.8		19 27 45.258	+ 3.7272	− .0113	− .0015	−27 50 6.81	+7.490	+ .500	+ .017	5	19.68
8077	Wi (1) 19^{h} 608	F8	7.16	6.9	27 46.617	2.9512	− .0016	+ .0065	+ 5 35 55.64	7.491	.396	+ .009	4	17.96
8078	BD−15° 5380	G0	10.0		27 50.858	3.4071	− .0064	+ .0001	−15 5 59.07	7.497	.457	− .040	4	18.64
8079	BD− 5° 4995	F8	9.2	9.1	27 58.399	3.1888	− .0039	− .0003	− 5 21 13.44	7.507	.428	− .044	5	19.65
8080	CD−26° 14281	F0	7.56	8.4	27 58.724	3.6824	− .0106	− .0030	−26 11 58.24	7.507	.495	− .015	4	18.00
8081	BD+48° 2904		8.9	8.5	19 28 3.367	+ 1.6730	− .0009	+ .002	+48 29 14.71	+7.514	+ .223	.00	4	18.49
8082	BD+14° 3947	A0	7.9	8.50	28 14.685	2.7606	− .0003	.000	+14 8 45.40	7.529	.370	+ .01	5	19.64
8083	BD+59° 2043	A5	*9.77*		28 17.090	0.9950	− .0084	+ .004	+59 12 11.25	7.532	.131	+ .01	4	18.56
8084	BD+ 4° 4145	K0	*8.53*	8.54	28 23.468	2.9790	− .0018	+ .0007	+ 4 19 42.73	7.541	.399	− .020	5	19.61
8085	BD+43° 3267	K5	8.0	8.40	28 26.011	1.8906	+ .0003	− .005	+43 40 31.14	7.544	.252	− .02	4	18.64
8086	BD+ 1° 4026	K2	8.9	8.4	19 28 39.720	+ 3.0306	− .0023	+ .0015	+ 1 56 53.61	+7.562	+ .405	− .009	4	18.00
8087	BD+19° 4053 *br.*	K0	9.5	9.4	28 44.726	2.6311	+ .0004	− .001	+19 38 31.72	7.570	.352	− .02	4	18.39
8088	8 Cygni	B3	4.85	4.77	28 47.867	2.2293	+ .0011	− .0002	+34 16 55.71	7.574	.298	− .003	4	19.13
8089	BD+11° 3882	F2	*8.2*	8.02	28 52.071	+ 2.8127	− .0006	+ .003	+11 52 16.86	7.579	+ .376	+ .01	4	18.11
8090	BD+79° 629	F5	*8.28*	8.46	29 13.15	− 3.6753	− .2096	− .0033	+79 37 3.53	7.608	− .499	− .028	4	18.67
8091	BD+27° 3426	K0	8.8	8.40	19 29 15.563	+ 2.4360	+ .0010	− .0023	+27 15 5.00	+7.611	+ .325	− .066	4	18.06
8092	BD−19° 5505	K0	8.23	8.10	29 28.341	3.5163	− .0082	+ .0016	−19 44 39.22	7.628	.470	− .017	5	18.25
8093	BD+61° 1872		*9.12*		30 8.17	0.7735	− .0123	− .006	+61 46 15.44	7.683	.101	− .02	4	18.29
8094	μ Aquilæ	K0	4.65	4.82	30 10.832	2.9166	− .0015	+ .0143	+ 7 12 30.00	7.686	.389	− .152	4	17.74
8095	BD+41° 3390		9.3		30 23.308	1.9621	+ .0006	.000	+41 59 37.26	7.703	.260	− .04	4	18.01
8096	BD+30° 3629	A2	8.81	8.75	19 30 27.820	+ 2.3564	+ .0011	− .0003	+30 8 27.36	+7.708	+ .314	+ .006	4	18.05
8097	BD+16° 3966	B3	6.81	7.1	30 41.290	2.7170	− .0001	.000	+16 5 24.79	7.727	.363	− .02	4	18.23
8098	BD+24° 3780	A2	9.0	8.71	30 43.441	2.5130	+ .0008	− .0005	+24 24 47.37	7.729	.335	− .004	4	18.37
8099	BD+57° 2021	A0	*9.63*	9.5	31 0.078	+ 1.1006	− .0072	.000	+57 59 56.71	7.752	+ .145	.00	4	18.36
8100	BD+85° 330	G5	*8.60*	8.80	31 1.75	−14.223	−1.658	+ .068	+85 55 28.56	7.754	−1.915	+ .005	4	18.41

8048. $10^{m}7$, $1''1$, 222°.
8050. $6^{m}1$ to 7^{m}.

8053. $8^{m}4$, $7''4$, 141
8074. K0, A0, $5^{m}36$, 35″, 55°.

8087. 13^{m}, $4''5$, 247°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8101	BD+10° 3969	A0	8.3	8.44	19 31 15.627	+2.8416	−0.0009	−0.001	+10 37 41.90	+7.773	+0.378	+0.02	5	19.59
8102	Oelt 19454	K2	6.25	6.32	31 39.11	−0.4651	− .0449	− .0045	+70 48 56.36	7.804	− .066	+ .062	12	18.82
8103	BD− 9° 5183	F5	8.7	8.81	31 42.936	+3.2734	− .0051	− .002	− 9 15 39.69	7.809	+ .436	+ .03	6 5	20.25 19.42
8104	*h* Sagittarii *br.*	B9	4.66	4.39	31 50.437	3.6481	− .0105	+ .0053	−25 3 40.71	7.819	.486	− .025	4 5	18.58 17.76
8105	CD−29° 16351	K0	9.13		31 59.120	3.7760	− .0129	− .0012	−29 45 24.79	7.831	.503	− .005	[illegible]	18.26
8106	Grmb 2880	A5	6.70	6.83	19 32 23.318	+1.7080	− .0008	− .0020	+47 59 22.74	+7.864	+ .226	− .065	4	17.41
8107	Pi 19h 180	K0	5.87	5.8	32 24.956	3.4818	− .0079	+ .0009	−18 24 35.46	7.866	.464	− .026	4	18.64
8108	BD− 1° 3782	B5	4.28	4.64	32 34.996	3.1041	− .0031	.0000	− 1 27 53.87	7.879	.413	− .019	[illegible]	18.05
8109	*κ* Aquilæ	B0	5.04	4.83	32 35.283	3.2281	− .0045	+ .0002	− 7 12 22.84	7.879	.430	− .002	97 74	19.49 19.35
8110	BD+ 7° 4151	A2	7.7	8.04	32 51.402	+2.9138	− .0014	.000	+ 7 22 19.32	7.901	+ .387	+ .02	[illegible]	18.08
8111	BD+74° 828	A5	*8.45*	8.36	19 33 5.15	−1.3826	− .0823	+ .0043	+74 35 42.19	+7.920	− .188	− .007	5	18.08
8112	CD−23° 15594		10.3		33 8.964	+3.6038	− .0100	− .0034	−23 23 50.39	7.925	+ .480	− .065	[illegible]	18.06
8113	BD+32° 3489		*9.14*	9.2	33 11.502	2.2868	+ .0012	+ .001	+32 37 59.44	7.928	.303	− .01	[illegible]	18.36
8114	BD−11° 5063	K0	9.1	8.7	33 24.068	3.3190	− .0056	+ .0012	−11 21 0.26	7.945	.440	+ .015	[illegible]	18.13
8115	BD− 3° 4656	A0	8.7	8.06	33 25.835	3.1344	− .0034	+ .0002	− 2 52 44.99	7.947	.416	+ .004	5	19.62
8116	BD+ 5° 4215	B8	8.51	8.42	19 33 28.252	+2.9595	− .0017	− .0022	+ 5 16 28.80	+7.951	+ .393	− .008	[illegible]	19.98
8117	BD+36° 3627		9.5		33 31.244	2.1492	+ .0011	.000	+36 58 30.76	7.954	.284	− .01	[illegible]	18.46
8118	Wi (2) 19h 960	A3	6.80	6.78	33 39.867	2.5816	+ .0006	+ .0019	+21 49.33.27	7.966	.342	+ .012	[illegible]	18.04
8119	*ε* Sagittæ	K0	5.67	5.44	33 40.109	2.7145	− .0001	+ .0010	+16 16 56.10	7.968	.360	+ .013	[illegible]	19.30
8120	BD− 4° 4865		8.8	8.9	33 49.954	3.1754	− .0040	+ .0007	− 4 47 22.55	7.979	.421	+ .006	5	19.37
8121	BD+12° 3995	K0	8.1	8.06	19 34 3.474	+2.7953	− .0006	− .002	+12 45 28.16	+7.998	+ .370	+ .01	4	18.41
8122	*θ* Cygni *br.*	F5	4.64	4.95	34 17.721	1.6112	− .0016	− .0030	+50 2 6.29	8.017	.212	+ .247	4 5	18.05 17.78
8123	BD+27° 3447	A2	*9.25*	8.8	34 26.250	2.4423	+ .0010	+ .0010	+27 14 31.52	8.028	.323	+ .011	[illegible]	19.09
8124	BD−13° 5428	A0	10.5	ft.	34 46.314	3.3528	− .0063	+ .0036	−12 53 30.58	8.055	.444	− .007	6	19.74
8125	Lal 37262	B3	6.37	6.63	34 48.669	3.0043	− .0023	− .0011	+ 3 11 55.54	8.058	.397	− .003	[illegible]	18.00
8126	BD−21° 5471		8.9	8.1	19 34 59.463	+3.5617	− .0095	+ .0002	−21 47 22.60	+8.073	+ .471	− .020	5	19.60
8127	BD+51° 2634	F8	*8.93*	8.7	35 1.686	1.5193	− .0025	− .001	+51 47 5.92	8.075	.199	− .04	4	18.41
8128	BD−15° 5419		10.4		35 3.109	3.4132	− .0072	+ .0012	−15 33 21.10	8.077	.452	+ .032	[illegible]	18.15
8129	BD+15° 3891		*8.94*	8.7	35 13.375	2.7324	− .0002	− .001	+15 33 12.67	8.091	.361	+ .02	[illegible]	18.15
8130	*σ* Aquilæ	B3	5.17	5.45	35 14.740	2.9611	− .0019	− .0001	+ 5 12 52.29	8.093	.392	.000	[illegible]	18.80
8131	BD+42° 3403	F5	8.9	8.7	19 35 21.860	+1.9321	+ .0005	− .001	+43 1 10.74	+8.102	+ .254	+ .01	[illegible]	18.00
8132	BD−17° 5706	A0	8.7	8.3	35 41.753	3.4476	− .0077	+ .0018	−17 3 45.72	8.129	.455	− .005	4	18.34
8133	BD+48° 2922	K0	6.50	6.30	35 43.412	1.6627	− .0012	+ .0027	+49 5 54.60	8.131	.218	+ .142	4	18.57
8134	BD+21° 3862	F2	7.22	7.48	36 0.044	2.5771	+ .0006	+ .001	+22 4 19.33	8.153	.340	+ .02	[illegible]	18.24
8135	54 Sagittarii	K0	5.45	5.26	36 8.450	3.4337	− .0075	+ .0046	−16 28 39.61	8.164	.453	− .054	5	17.58
8136	BD+19° 4111	G5	7.8	7.98	19 36 23.828	+2.6475	+ .0003	− .001	+19 12 54.85	+8.185	+ .349	− .04	4	18.57
8137	BD+ 8° 4182	B9	8.4	8.80	36 34.618	+2.8816	− .0012	− .002	+ 8 54 25.89	8.199	+ .380	+ .03	4	17.63
8138	BD+69° 1059		*9.25*		36 38.05	−0.2960	− .0419	− .0025	+70 6 8.34	8.204	− .043	+ .030	4	17.95
8139	14 Cygni	B8	5.39	5.50	36 50.213	+1.9507	+ .0005	+ .0019	+42 37 57.38	8.220	+ .256	+ .024	6	[illegible]
8140	Grmb 2907	F5	5.86	6.08	36 53.284	1.3460	− .0045	+ .0051	+54 47 8.78	8.224	.176	+ .170	4	18.06
8141	BD+25° 3915	F5	*9.16*		19 36 58.430	+2.4991	+ .0009	+ .0013	+25 12 34.83	+8.231	+ .329	− .035	4	17.40
8142	CD−29° 16446	K0	8.4		36 58.975	3.7617	− .0133	− .0014	−29 29 12.63	8.232	.497	− .011	4	18.28
8143	BD+38° 3696	A0	*8.62*	8.42	37 0.396	2.0962	+ .0010	− .0004	+38 42 40.43	8.233	.275	+ .047	[illegible]	19.43
8144	BD+53° 2281	K2	*9.02*	9.5	37 1.978	1.4189	− .0036	+ .004	+53 37 17.60	8.236	.185	+ .01	4 5	18.43 17.64
8145	BD+47° 2891		*8.82*	9.1	37 9.267	1.7545	− .0006	− .003	+47 15 42.74	8.245	.229	.00	[illegible]	18.10
8146	BD+34° 3655		*8.00*	7.80	19 37 15.052	+2.2180	+ .0012	.000	+35 3 47.13	+8.253	+ .291	+ .02	[illegible]	17.81
8147	*β* Sagittæ	K0	4.45	4.54	37 27.340	2.6938	.0000	+ .0001	+17 17 23.39	8.269	.354	− .038	4	17.30
8148	BD+13° 4102		8.1	8.86	37 28.741	2.7715	− .0004	− .001	+13 53 51.09	8.271	.365	+ .01	4	18.03
8149	BD− 7° 5036		9.2	9.3	37 30.576	3.2225	− .0048	+ .001	− 7 1 1.80	8.273	.424	+ .02	4	18.15
8150	BD+ 4° 4190	K2	*9.37*	8.3	37 45.549	2.9761	− .0020	− .0014	+ 4 32 25.66	8.293	.391	+ .003	[illegible]	18.51
8151	BD+ 0° 4275	F5	8.19	8.8	19 37 54.598	+3.0516	− .0028	− .0054	+ 0 59 45.04	+8.305	+ .401	− .079	[illegible]	18.14
8152	*e* Sagittarii	F0	5.10	5.08	37 56.630	3.4286	− .0076	+ .0042	−16 18 44.92	8.308	.451	− .017	4	18.65
8153	BD+23° 3739	G	8.64	8.61	38 16.384	2.5341	+ .0008	− .0032	+23 53 58.66	8.334	.332	− .206	[illegible]	17.89
8154	Brad 2500	B9	6.26	6.46	38 27.633	2.8144	− .0008	− .0006	+12 0 16.48	8.349	.369	− .008	4	18.10
8155	BD+46° 2753		9.76		38 31.650	1.7883	− .0004	− .002	+46 35 49.42	8.354	.233	+ .01	4	18.72
8156	BD−19° 5561	K2	8.1	8.32	19 38 32.639	+3.4981	− .0088	.0000	−19 18 6.42	+8.356	+ .460	− .020	5	17.84
8157	CD−25° 14281		9.8		38 34.097	+3.6484	− .0114	− .0015	−25 21 29.62	8.358	+ .480	− .035	6	19.27
8158	BD+71° 968		*8.94*	9.12	38 36.39	−0.5272	− .0511	+ .0119	+71 21 23.84	8.361	− .073	+ .037	4	18.38
8159	BD− 8° 5078	F5	6.96	6.86	38 42.920	+3.2541	− .0052	+ .002	− 8 29 45.44	8.369	+ .427	− .06	[illegible]	19.47
8160	BD+73° 872	A0	*9.12*	8.94	38 46.56	−0.9845	− .0697	− .0042	+73 20 23.95	8.374	− .134	− .020	5	19.63

8104. $9^{m}7$, $2''8$, 162°.

8122. 14^{m}, $2''6$, 41°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8161	BD−11° 5097	F8	7.9	8.01	19 38 46.877	+3.3058	−0.0059	+0.0034	−10 51 59.53	+8.375	+0.434	−0.119	4	18.40
8162	BD+56° 2283	A0	*8.10*	7.94	38 56.936	1.2368	− .0060	− .001	+56 31 52.49	8.388	.160	+ .02	4	18.48
8163	BD+29° 3702	F5	7.*59*	7.82	39 1.074	2.3915	+ .0011	+ .0033	+29 18 25.43	8.393	.313	+ .044	4	18.26
8164	BD+39° 3878	A3	6.20	6.34	39 13.378	2.0525	+ .0009	− .0025	+40 3 51.15	8.410	.268	+ .011	5	19.55
8165	BD+17° 4059	B3	7.9	7.86	39 13.510	2.6837	+ .0001	− .001	+17 46 42.28	8.410	.351	+ .01	4	18.06
8166	BD+31° 3727		*8.44*	8.40	19 39 22.589	+2.3280	+ .0011	− .0005	+31 33 18.32	+8.422	+ .304	− .216	4	18.47
8167	BD+63° 1555		*9.40*		39 28.46	0.6055	− .0175	.000	+63 49 47.88	8.430	.077	− .02	5	18.41
8168	BD−21° 5500	G5	8.5	8.34	39 44.288	3.5374	− .0096	+ .0025	−20 58 48.15	8.451	.464	+ .075	4	18.10
8169	BD+26° 3651	B8	9.6	8.9	39 57.866	2.4601	+ .0010	− .0001	+26 49 38.69	8.469	.322	− .007	4	18.18
8170	BD+ 7° 4197	B9	7.7	8.30	40 22.607	2.9156	− .0016	− .001	+ 7 23 45.49	8.501	.382	.00	5	19.62
8171	10 Vulpeculæ	G5	5.45	5.30	19 40 23.266	+2.4934	+ .0009	+ .0004	+25 34 46.66	+8.502	+ .326	+ .013	4	19.13
8172	BD+34° 3681	K5	*8.28*	8.9	40 26.006	2.2353	+ .0012	+ .001	+34 41 2.46	8.506	.291	+ .03	4	18.57
8173	BD−13° 5462	K0	7.32	7.02	40 41.786	3.3501	− .0068	+ .0015	−12 55 10.76	8.527	.438	.000	4	18.40
8174	Lac 8211	B8	5.56		40 55.177	3.8311	− .0154	− .0005	−32 6 8.75	8.544	.501	− .028	4	18.66
8175	BD+12° 4063		9.5	9.4	41 13.000	2.7971	− .0007	− .001	+12 51 10.63	8.568	.364	+ .01	4	18.15
8176	BD− 0° 3835	A2	8.3	7.64	19 41 20.136	+3.0799	− .0033	− .0008	− 0 20 22.73	+8.577	+ .402	− .003	4	18.10
8177	15 Cygni	K0	5.02	5.18	41 23.383	2.1573	+ .0011	+ .0057	+37 9 37.21	8.581	.280	+ .034	6	19.83
8178	CD−27° 14257	K0	9.0		41 36.954	3.6930	− .0127	+ .0046	−27 11 49.87	8.600	.483	− .015	4	16.08
8179	BD+67° 1187	F5	*9.00*	8.96	41 38.71	0.1801	− .0291	+ .0043	+67 20 57.52	8.602	.020	+ .060	5	19.30
8180	BD− 3° 4701	B3	6.50	6.54	41 41.295	3.1376	− .0039	− .0007	− 3 4 42.03	8.605	.409	+ .009	6	18.00
8181	*f* Sagittarii *m.*	K0	5.06	4.88	19 41 41.823	+3.5109	− .0094	− .0095	−19 57 15.78	+8.606	+ .459	− .096	4	18.15
8182	BD+52° 2501	A2	7.67	7.66	41 48.358	1.5049	− .0029	+ .0063	+52 25 1.09	8.614	.194	+ .017	4	18.24
8183	BD+64° 1377	G0	*8.74*	8.76	41 49.83	0.5426	− .0196	− .0019	+64 30 13.81	8.616	.068	− .023	5	19.63
8184	BD+63° 1557		*8.67*	9.3	42 16.56	0.6896	− .0162	− .010	+63 10 4.41	8.651	.087	+ .05	4 5	18.49 17.69
8185	γ Aquilæ	K2	2.80	2.90	42 27.377	2.8512	− .0011	+ .0009	+10 25 2.65	8.665	.371	− .004	112 96	19.79 19.77
8186	BD+ 2° 3986	K2	8.4	8.43	19 42 27.527	+3.0167	− .0027	− .0006	+ 2 39 46.69	+8.666	+ .393	− .033	4	18.01
8187	δ Cygni *br.*	A0	2.98	3.20	42 28.437	1.8705	+ .0001	+ .0050	+44 56 5.34	8.667	.241	+ .037	5	17.39
8188	BD+46° 2773	G5	7.9	8.00	42 40.292	1.8068	− .0002	+ .001	+46 25 27.69	8.683	.233	+ .01	4	17.82
8189	CD−23° 15745	A3	8.2		42 42.872	3.5841	− .0108	+ .0016	−23 0 26.56	8.686	.469	.000	4	17.86
8190	BD+ 5° 4290 *br.*	B9	8.5	8.35	43 0.780	2.9469	− .0019	− .004	+ 5 57 59.87	8.710	.383	+ .02	4	18.07
8191	BD−16° 5439	G5	9.2	8.4	19 43 20.518	+3.4336	− .0082	− .0020	−16 42 7.43	+8.735	+ .448	− .096	4	18.08
8192	BD−14° 5552	B9	*8.26*	8.28	43 30.795	3.3896	− .0075	+ .0001	−14 45 56.14	8.749	.440	+ .036	4	18.33
8193	BD+21° 3908	A2	9.2	9.2	43 34.422	2.6038	+ .0005	.000	+21 18 32.89	8.754	.337	.00	4	18.35
8194	δ Sagittæ	•	3.78	3.58	43 49.204	+2.6745	+ .0001	+ .0001	+18 20 9.88	8.773	+ .347	+ .009	5	19.62
8195	BD+72° 909	A2	*8.62*	8.68	43 54.95	−0.6991	− .0618	+ .0059	+72 20 0.41	8.781	− .095	+ .040	5	19.62
8196	BD+ 9° 4264	K5	8.0	7.19	19 44 7.849	+2.8644	− .0012	.000	+ 9 50 26.89	+8.797	+ .372	− .01	4	18.42
8197	Oelt 19977 *br.*	F0	6.10	5.76	44 12.231	3.7378	− .0140	+ .0093	−28 59 12.74	8.803	.486	− .100	5	19.82
8198	BD+28° 3478	G5	*8.33*	7.80	44 13.860	2.4266	+ .0011	+ .0004	+28 17 15.69	8.805	.314	− .021	4	18.21
8199	Wi (2) 19h 1346	K0	6.04	5.78	44 27.366	2.5084	+ .0009	+ .0052	+25 11 7.81	8.823	.324	− .022	4	18.41
8200	BD+16° 4007 *br.*		*9.58*		44 37.437	2.7242	− .0002	− .001	+16 12 5.60	8.836	.352	+ .04	4	18.47
8201	BD− 4° 4926		7.9	8.37	19 44 42.814	+3.1712	− .0044	+ .0003	− 4 41 46.15	+8.843	+ .411	− .008	4	18.22
8202	BD+58° 1961	G0	*7.88*	7.83	44 43.063	1.1408	− .0079	− .001	+58 10 8.28	8.844	.145	− .02	4	18.39
8203	BD+50° 2883	A3	8.22	8.32	44 55.386	1.6349	− .0017	+ .003	+50 10 56.04	8.860	.210	+ .01	5	19.62
8204	BD+14° 4048 *m.*	F5	7.64	7.5	44 59.016	+2.7547	− .0004	+ .001	+14 51 30.95	8.864	+ .356	+ .02	4	17.98
8205	BD+81° 679		*9.20*		45 7.06	−5.5789	− .4416	+ .0015	+82 6 53.22	8.875	− .733	+ .017	4	18.18
8206	BD+62° 1755		*9.57*		19 45 10.15	+ 0.7923	− .0145	+ .004	+62 17 1.59	+8.879	+ .100	− .03	4	20.59
8207	BD− 7° 5072	A2	8.9		45 20.830	3.2197	− .0052	+ .002	− 6 59 50.28	8.892	.417	+ .03	4	18.22
8208	ζ Sagittæ *m.*	A2	*5.02*	5.11	45 25.557	2.6618	+ .0002	+ .0013	+18 56 25.93	8.899	.344	+ .025	4	18.31
8209	CD−25° 14375	K0	8.0	7.80	45 48.492	3.6436	− .0123	+ .0001	−25 30 28.98	8.929	.472	− .023	5	19.60
8210	BD− 0° 3852	K5	9.3	8.5	46 0.131	3.0761	− .0034	+ .0021	− 0 9 50.67	8.944	.398	− .021	4	18.10
8211	51 Aquilæ	F0	5.55	5.41	19 46 22.764	+3.3045	− .0064	− .0016	−10 58 3.10	+8.974	+ .427	+ .036	4	18.24
8212	Lal 37758	B3	6.39	6.17	46 24.594	2.9112	− .0017	− .0006	+ 7 41 58.72	8.976	.376	+ .001	4	17.62
8213	BD+44° 3260	A0	*9.5*		[illegible]	1.8825	+ .0002	− .003	+44 53 19.13	8.978	.242	+ .04	4	18.33
8214	BD+66° 1242	A0	*9.42*		46 29.91	0.2773	− .0272	+ .0027	+66 42 41.77	8.983	.035	+ .005	4	18.41
8215	BD+38° 3772	G5	6.21	6.40	46 37.551	2.1224	+ .0011	+ .0002	+38 30 28.94	8.993	.272	− .016	7	20.38
8216	BD+32° 3587	A2	8.33	8.35	19 46 38.351	+2.2049	+.0013	+ .002	+33 4 28.00	+8.994	+ .296	− .02	5	18.56
8217	BD−18° 5508	A	9.2		46 43.112	3.4727	− .0092	+ .001	−18 31 5.03	9.000	.449	.00	4	18.03
8218	α Aquilæ	A5	0.89	1.07	46 52.819	2.8910	− .0015	+ .0361	+ 8 39 22.20	9.013	.373	+ .381	127 100	20.07 20.42
8219	BD+20° 4300	B9	*8.45*	7.58	47 2.780	2.6296	+ .0004	.000	+20 22 25.88	9.028	.338	.00	4	18.08
8220	BD+53° 2303	B8	6.85	6.95	47 7.400	1.4566	− .0036	+ .003	+53 33 53.59	9.032	.186	+ .01	4	17.43

8181. 6^m0–6^m0, 0″.4, 3°.
8187. 8^m0, 2″.0, 290°.
8190. 10^m4, 2″.6, 9°.
8194. Ma, A0.
8197. 11^m9, 2″.0, 290°.
8200. 13^m, 1″.3, 113°.
8204. 8^m1–8^m3, 0″.2, 107°.
8208. 5^m3–6^m3, 0″.3, 167°, 25 yrs., 8^m0, 8″.4, 310°.

No.	Name	Sp.	Mag.	Obs. Mag.	R.A. 1920.0	Prec.	Sec.Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8221	BD+54° 2229	G0	*9.12*	9.2	19 47 42.480	+1.3814	−0.0046	+0.003	+54 50 10.40	+9.077	+0.175	+0.03	4	17.83
8222	BD+23° 3808	K0	9.2	8.6	48 5.454	2.5398	+ .0008	+ .0015	+24 6 58.36	9.108	.326	− .001	4	18.05
8223	BD+ 3° 4176	K5	*8.81*	8.58	48 19.907	2.9878	− .0025	− .0021	+ 4 4 46.62	9.126	.384	− .030	4	18.32
8224	η Aquilæ	G0	Var.	3.85	48 23.871	+3.0561	− .0032	+ .0005	+ 0 47 57.87	9.131	+ .393	− .009	4	17.74
8225	ε Draconis *br.*	K0	4.03	3.96	48 27.06	−0.2068	− .0446	+ .0158	+70 3 51.24	9.135	− .031	+ .031	12	19.60 20.10
8226	BD+18° 4276	Oe	6.29	6.18	19 48 47.608	+2.6758	+ .0001	− .002	+18 27 55.32	+9.162	+ .343	− .02	4	18.06
8227	BD+42° 3497		9.0	8.42	48 53.258	1.9886	+ .0008	− .002	+42 22 21.84	9.170	.255	− .02	4	18.08
8228	BD+11° 4025	A0	*8.7*	8.42	48 57.856	2.8209	− .0009	− .001	+11 58 2.83	9.175	.361	+ .01	5	19.44
8229	BD+30° 3783		*9.00*	9.2	48 59.068	2.3787	+ .0012	+ .0003	+30 17 27.34	9.177	.305	− .005	[illegible]	19.07
8230	BD−20° 5752	G0	9.2		49 1.877	3.5186	− .0102	+ .0080	−20 34 23.37	9.181	.453	− .136	5	19.69
8231	BD+37° 3649	A5	*7.91*	7.63	19 49 3.214	+2.1721	+ .0012	+ .002	+37 10 10.05	+9.183	+ .277	.00	[illegible]	18.32
8232	Paris 27025	*	5.64	5.9	49 7.349	3.1417	− .0043	+ .0010	− 3 19 21.53	9.188	.403	+ .006	[illegible]	18.12
8233	BD+ 9° 4303		10.5	ft.	49 23.923	2.8778	− .0013	+ .001	+ 9 19 30.07	9.209	.369	+ .04	[illegible]	18.11
8234	Lac 8262	K0	6.28	6.1	49 30.424	3.6046	− .0120	− .0093	−24 8 26.78	9.217	.462	− .411	4	18.54
[illegible]	BD+57° 2077	F8	*9.62*		49 34.421	1.1909	− .0075	+ .005	+57 46 3.74	9.222	.150	+ .02	[illegible]	18.34
8236	BD+ 1° 4130	A0	*9.49*		19 49 39.322	+3.0338	− .0029	− .0008	+ 1 52 50.61	+9.229	+ .388	− .026	[illegible]	18.15
8237	BD+26° 3706	A0	*8.23*	7.86	49 53.782	2.4847	+ .0010	+ .0002	+26 22 43.43	9.248	.317	+ .006	4	19.01
8238	CD−27° 14376	K0	8.8	8.31	50 13.008	3.6847	− .0137	+ .0010	−27 19 8.34	9.273	.472	− .033	[illegible]	19.77
8239	Brad 2531 *n. pr.*	B3	5.78	5.58	50 17.889	3.2484	− .0058	+ .0004	− 8 26 11.93	9.279	.416	− .021	4	17.63
8240	BD+68° 1084	A3	*8.25*	8.72	50 34.27	0.0838	− .0353	.0000	+68 23 38.46	9.301	.007	+ .011	6	18.95
8241	BD+65° 1409	G5	7.85	7.94	19 50 35.17	+0.4942	− .0229	− .0088	+65 20 25.01	+9.302	+ .060	− .013	[illegible]	17.99
8242	BD−14° 5585	A2	8.5	8.43	50 36.042	3.3677	− .0077	− .0012	−13 59 38.20	9.303	.431	− .004	4	17.63
8243	BD+60° 2033		*8.72*	8.78	50 42.59	0.9826	− .0114	+ .001	+60 28 52.44	9.311	.123	.00	[illegible]	19.64
8244	Wi (2) 19$^{\mathrm{h}}$ 1585	A0	6.82	7.00	50 46.117	2.2633	+ .0014	+ .0023	+34 22 27.01	9.316	.288	+ .010	5	18.14
8245	Grmb 2964	B3	6.82	7.28	50 55.286	2.0391	+ .0010	.0000	+41 8 47.24	9.327	.259	− .016	4	18.39
8246	BD− 4° 4968		9.4		19 50 57.549	+3.1659	− .0046	+ .0002	− 4 30 17.38	+9.330	+ .405	− .009	[illegible]	18.46
8247	BD−22° 5279	K0	9.5		51 9.446	3.5547	− .0111	− .0008	−22 10 49.80	9.346	.455	− .001	5	18.07
8248	β Aquilæ	K0	3.90	3.82	51 23.016	2.9442	− .0021	+ .0024	+ 6 12 21.62	9.363	.375	− .483	101 85	19.91 19.91
8249	BD−12° 5581	A0	9.5		51 26.559	3.3385	− .0073	.0000	−12 40 40.43	9.368	.428	− .015	4	18.36
8250	BD+15° 3985	K2	8.34	7.71	51 27.457	2.7509	− .0004	− .0019	+15 14 8.79	9.369	.350	− .016	5	17.36
8251	BD+47° 2949		*7.70*	7.42	19 52 7.144	+1.7762	− .0006	− .0026	+47 42 9.90	+9.420	+ .225	− .012	5	19.64
8252	CD−25° 14457	F8	8.4	8.0	52 16.212	+3.6302	− .0129	+ .0065	−25 18 8.95	9.432	+ .463	− .041	4	18.03
8253	BD+77° 750		*8.40*	8.88	52 17.89	−2.3745	− .1665	− .0142	+77 47 10.76	9.433	− .309	+ .003	4	18.35
8254	BD+51° 2707	K7	*8.40*	8.65	52 19.502	+1.5833	− .0024	− .003	+51 38 2.99	9.436	+ .200	− .03	4	17.85
8255	φ Aquilæ	A2	5.29	5.12	52 26.948	+2.8391	− .0011	+ .0013	+11 12 37.69	9.445	+ .360	+ .008	[illegible]	18.79
8256	BD+75° 714	F5	8.77	8.90	19 52 56.79	−1.3814	− .1031	+ .0003	+75 11 38.55	+9.483	− .182	− .026	[illegible]	17.94
8257	BD+32° 3634	A0	7.24	7.00	53 2.662	+2.3124	+ .0014	+ .001	+32 51 40.20	9.491	+ .292	+ .01	4	17.83
8258	η Cygni *br.*	K0	4.03	4.18	53 18.245	2.2530	+ .0014	− .0028	+34 52 12.40	9.511	.285	− .039	4	17.73
8259	g Sagittarii	A0	5.05	5.38	53 24.853	3.4034	− .0085	+ .0004	−15 42 17.01	9.520	.433	− .090	4	18.17
8260	ψ Cygni *br.*	A3	4.90	5.28	53 33.709	1.5557	− .0027	− .0044	+52 13 33.63	9.531	.195	− .031	4	17.91
8261	BD+27° 3566	A0	*8.02*	7.68	19 53 42.801	+2.4583	+ .0012	+ .0025	+27 36 3.43	+9.543	+ .312	+ .016	[illegible]	18.09
8262	BD− 6° 5320	A0	8.40	8.30	53 57.605	3.2079	− .0055	.000	− 6 34 1.38	9.562	.407	+ .04	[illegible]	18.02
8263	BD+43° 3417	F5	*9.30*	9.5	54 1.767	1.9577	+ .0006	.000	+43 30 50.20	9.567	.246	.00	4	18.74
8264	Pi 19$^{\mathrm{h}}$ 371	K2	5.13	5.25	54 23.887	1.1482	− .0087	− .0009	+58 37 54.63	9.595	.143	− .024	4	17.69
8265	BD+39° 3969	K0	8.8	8.83	54 31.085	2.1078	+ .0013	.0000	+39 26 34.56	9.605	.266	.000	[illegible]	18.13
8266	θ^{1} Sagittarii	B3	4.39		19 54 32.002	+3.9091	− .0197	+ .0013	−35 29 37.11	+9.606	+ .496	− .044	[illegible]	19.14
8267	BD+78° 694	K5	7.80	7.83	54 41.95	−2.6460	− .1914	+ .0030	+78 24 49.69	9.618	− .342	+ .015	4	17.98
8268	BD− 0° 3889	F5	9.1		54 47.918	+3.0736	− .0036	− .0015	− 0 2 44.90	9.626	+ .389	− .007	5	18.20
8269	BD+37° 3698	K2	*7.34*	7.17	54 58.680	2.1604	+ .0013	.000	+37 54 16.61	9.639	.272	.00	4	17.72
8270	CD−26° 14697	F5	9.8		55 3.532	3.6461	− .0135	− .0052	−26 4 48.58	9.646	.461	− .060	4	18.53
8271	BD−20° 5781	K0	8.8		19 55 5.654	+3.5090	− .0107	− .0025	−20 25 40.84	+9.648	+ .443	− .033	4	18.06
8272	BD+79° 649	A5	*8.88*	9.1	55 10.35	−3.1785	− .2366	− .0045	+79 23 20.39	9.655	− .410	+ .029	[illegible]	18.34
8273	γ Sagittæ	K5	3.71	3.50	55 11.934	+2.6632	+ .0002	+ .0042	+19 16 26.56	9.657	+ .335	+ .016	87 74	19.53 19.50
8274	Wi (1) 19$^{\mathrm{h}}$ 1305	G5	6.35	6.28	55 18.653	3.0490	− .0033	+ .0015	+ 1 9 28.39	9.665	.385	+ .072	4	18.00
8275	Wi (1) 19$^{\mathrm{h}}$ 1312	K0	6.55	6.2	55 24.541	2.8433	− .0012	+ .0003	+11 5 14.29	9.673	.359	− .004	4	18.31
8276	BD+ 4° 4302	K2	*9.60*		19 55 32.888	+2.9739	− .0024	− .0013	+ 4 49 28.09	+9.683	+ .375	− .018	4	18.13
8277	BD+25° 4050	K5	8.4	8.31	55 42.915	2.5080	+ .0011	− .0004	+25 46 14.59	9.697	.316	− .015	4	18.01
8278	BD+49° 3144	A2	*8.90*	8.67	55 43.593	1.6728	− .0015	+ .003	+50 7 28.20	9.697	.209	− .02	5	19.64
8279	Brad 2553	F0	5.70	5.55	55 44.538	2.5791	+ .0008	− .0053	+22 52 57.87	9.699	.324	+ .012	5	18.56
8280	BD+45° 3022	K2	8.60	8.24	55 55.901	1.8960	+ .0002	+ .0003	+45 11 16.13	9.713	.238	+ .005	5	19.71

8224. 3$^{\mathrm{m}}$7 to 4$^{\mathrm{m}}$3.
8225. 8$^{\mathrm{m}}$1, 3″0, 8°

8232. F0p, A.
8239. 6$^{\mathrm{m}}$53, 36″, 171°.

8258. 13$^{\mathrm{m}}$, 7″0, 206°.
8260. 7$^{\mathrm{m}}$0, 3″2, 180°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8281	BD−18° 5563	Ma	8.5	7.79	19 56 5.432	+3.4639	−0.0099	+0.0010	−18 30 32.82	+ 9.725	+0.438	−0.014	4	18.60
8282	CD−29° 16725		9.6		56 21.990	3.7247	− .0154	− .0018	−29 10 27.57	9.746	.471	− .074	5	19.66
8283	BD−14° 5613	K0	7.16	6.73	56 37.226	3.3672	− .0082	+ .0001	−14 9 41.32	9.765	.425	− .025	4	18.12
8284	BD−12° 5617	K0	8.9	8.7	56 45.504	3.3222	− .0074	+ .0020	−12 4 20.88	9.776	.418	+ .032	4	18.07
8285	BD− 2° 5166	K0	9.37		56 46.134	3.1099	− .0041	− .0004	− 1 49 36.32	9.777	.391	− .032	4	18.42
8286	BD+32° 3660		*8.59*	8.0	19 56 51.192	+2.3377	+ .0014	− .001	+32 13 10.76	+ 9.783	+ .293	− .03	4	18.07
8287	BD− 9° 5324	A2	7.41	7.43	57 1.920	+3.2722	− .0066	+ .0015	− 9 42 31.90	9.797	+ .412	+ .018	4	18.16
8288	BD+80° 637		*8.30*	8.7	57 5.97	−4.2809	− .3494	+ .0064	+80 59 33.83	9.802	− .549	− .036	4	18.45
8289	BD+34° 3832	K2	7.87	7.60	57 18.703	+2.2527	+ .0014	+ .001	+35 8 16.15	9.818	+ .282	− .03	4	17.89
8290	BD+ 5° 4381	F5	7.56	7.39	57 19.144	2.9620	− .0023	− .0035	+ 5 25 37.94	9.819	.373	− .023	4	17.85
8291	BD+14° 4132	A0	7.03	6.66	19 57 26.035	+2.7758	− .0006	.000	+14 18 6.38	+ 9.828	+ .348	+ .01	5	19.67
8292	BD+59° 2156	K0	*8.27*	7.98	57 27.249	1.1112	− .0097	− .005	+59 17 59.08	9.829	.137	− .02	4	18.00
8293	BD+22° 3889	K0	*8.32*	7.71	57 29.798	2.5874	+ .0007	+ .001	+22 37 31.75	9.832	.324	.00	4	17.84
8294	c Sagittarii	Mb	4.60	4.47	57 44.503	3.6900	− .0148	+ .0027	−27 55 59.91	9.851	.465	+ .010	4	17.76
8295	15 Vulpeculæ	A5	4.74	4.92	57 48.291	2.4661	+ .0012	+ .0039	+27 31 53.98	9.856	.309	+ .006	4	17.78
8296	BD+41° 3566	K2	9.5	8.8	19 58 7.488	+2.0344	+ .0010	.000	+41 45 52.74	+ 9.880	+ .253	− .04	4	19.05
8297	BD+54° 2267	A2	*8.62*	8.65	58 26.624	1.4153	− .0047	− .0037	+54 58 13.71	9.904	.175	− .004	4	18.15
8298	BD+ 1° 4185	A0	*9.10*	8.6	58 33.496	3.0372	− .0033	− .0010	+ 1 45 1.90	9.913	.381	− .002	4	18.02
8299	BD+17° 4197	K0	*8.20*	7.88	58 35.660	2.7111	− .0001	.000	+17 17 32.36	9.916	.339	− .02	5	18.66
8300	BD+20° 4389	A0	*8.44*	8.35	58 47.084	2.6340	+ .0005	.000	+20 42 10.82	9.930	.330	.00	4	17.85
8301	BD+67° 1218		*8.90*	9.1	19 58 58.61	+0.3017	− .0310	− .0040	+67 16 47.71	+ 9.945	+ .034	+ .048	4	17.89
8302	BD− 6° 5348	A0	9.1	9.1	58 59.821	3.1948	− .0055	+ .003	− 6 0 25.93	9.946	.400	− .04	4	18.03
8303	BD+12° 4198	A0	9.1		59 13.632	2.8184	− .0009	− .001	+12 22 16.98	9.964	.353	.00	4	17.98
8304	CD−24° 15785	K5	8.8		59 14.571	3.6030	− .0131	.0000	−24 34 41.53	9.965	.452	− .023	4	18.11
8305	Lac 8322	K0	5.05		59 15.414	3.8052	− .0180	+ .0028	−32 16 54.83	9.966	.478	− .003	4	17.46
8306	BD+ 7° 4351	G5	9.1	8.9	19 59 28.058	+2.9248	− .0019	− .004	+ 7 16 25.69	+ 9.982	+ .365	.00	4	17.66
8307	τ Aquilæ	K0	5.65	5.50	20 0 13.842	2.9296	− .0020	+ .0009	+ 7 3 4.73	10.040	.366	+ .021	5	17.29
8308	Pi 19^{h} 377	G5	7.11	7.51	0 15.751	3.5292	− .0116	+ .0040	−21 32 25.47	10.042	.441	− .015	4	17.68
8309	Lac 8334	A0	7.08	6.9	0 19.310	3.6629	− .0146	+ .0012	−27 2 25.91	10.047	.457	− .003	4	17.92
8310	Pulk (55) 2884	K0	5.68	5.65	0 19.825	2.4136	+ .0014	+ .0516	+29 40 58.71	10.047	.300	− .527	4	16.54
8311	BD+61° 1961	K0	*7.90*	7.72	20 0 28.00	+0.9052	− .0144	− .001	+61 55 43.64	+10.058	+ .110	.00	4 5	18.26 17.51
8312	BD+76° 769	F0	*8.72*	8.58	0 53.76	−1.8437	− .1426	+ .0134	+76 46 58.37	10.090	− .237	+ .006	4	17.65
8313	BD−18° 5590	A2	8.1		1 1.443	+3.4462	− .0101	− .0019	−17 55 42.49	10.100	+ .429	− .033	5	17.73
8314	BD+69° 1088	G5	*8.36*	8.6	1 4.80	−0.0508	− .0447	+ .0173	+69 43 13.76	10.102	− .010	+ .030	4	18.01
8315	BD−16° 5500	G0	8.5	8.4	1 15.645	+3.4031	− .0092	+ .0130	−15 58 57.61	10.118	+ .424	− .084	5	17.76
8316	BD+ 3° 4243	G5	*8.79*	8.67	20 1 32.384	+3.0067	− .0029	+ .0081	+ 3 16 38.35	+10 139	+ .374	− .169	4	17.66
8317	η Sagittæ	K0	5.26	5.20	1 36.559	2.6586	+ .0004	+ .0016	+19 45 39.06	10.144	.330	+ .080	4	17.62
8318	BD− 8° 5223	K0	8.6	8.55	1 36.679	3.2419	− .0063	− .002	− 8 21 1.31	10.144	.403	− .08	4	18.07
8319	CD−28° 16408 *m.*	F2	8.1		1 43.895	3.7010	− .0157	+ .0045	−28 36 3.34	10.153	.461	− .015	4	18.08
8320	Wi (1) 19^{h} 1472	K0	8.76	8.89	1 59.288	3.1594	− .0050	+ .0021	− 4 18 24.73	10.173	.393	− .049	4	17.61
8321	Oelt 19983	A0	5.98	6.22	20 2 5.135	+1.7941	− .0004	+ .0011	+48 0 5.06	+10.180	+ .221	+ .004	4	17.76
8322	BD−11° 5230 *m.*	G5	9.1		2 16.684	3.2937	− .0073	.0000	−10 52 21.91	10.195	.409	− .032	5	19.97
8323	BD+39° 4027	K2	*8.83*	9.2	2 27.868	2.1341	+ .0014	+ .002	+39 13 10.82	10.209	.263	− .02	4	17.67
8324	BD− 0° 3911	K2	8.5	7.86	2 44.154	3.0800	− .0040	− .0026	− 0 21 48.27	10.229	.382	− .038	4	17.85
8325	BD+27° 3616	F5	9.2		3 3.249	2.4719	+ .0013	+ .0015	+27 37 7.94	10.253	.305	− .021	4	17.44
8326	BD−20° 5820	K0	8.4	8.5	20 3 6.780	+3 4908	− .0111	+ .0002	−20 0 30.30	+10.258	+ .433	− .060	4	17.93
8327	BD+24° 4002 *br.*	G	8.5	8.41	3 19.373	2.5568	+ .0009	+ .0044	+24 12 21.32	10.273	.316	+ .139	4	18.04
8328	Brad 2573	K0	5.52	5.30	3 23.429	2.2467	+ .0016	− .0189	+35 45 5.67	10.278	.277	− .438	4	17.45
8329	Wi (1) 19^{h} 1531 *br.*	F5	6.54	6.78	3 59.058	2.8879	− .0016	+ .0030	+ 9 9 59.82	10.323	.357	+ .023	6	18.20
8330	Brad 2586	K0	5.57	5.43	4 16.55	0.9413	− .0141	+ .0177	+61 45 46.28	10.345	.113	+ .072	4	17.67
8331	BD+55° 2326	A0	*9.27*	9.1	20 4 19.626	+1.3858	− .0054	+ .001	+55 50 44.45	+10.348	+ .168	− .01	4	17.98
8332	BD+11° 4146	A0	7.9	8.00	4 32.434	2.8406	− .0011	− .001	+11 28 14.10	10.364	.351	+ .02	5	17.84
8333	CD−24° 15837	A3	9.0		4 32.543	3.5881	− .0134	+ .0009	−24 15 24.24	10.365	.444	− .011	4	18.05
8334	BD+20° 4442	A2	8.25	8.05	4 47.770	2.6498	+ .0004	− .001	+20 18 8.44	10 384	.325	− .02	4	18.05
8335	BD+ 3° 4264		*9.81*		5 0.186	3.0083	− .0030	+ .0014	+ 3 13 41.12	10.390	.371	− .029	4	18.52
8336	BD−22° 5346	G0	9.1		20 5 1.992	+3.5431	− .0125	+ .0028	−22 22 47.19	+10.401	+ .437	− .005	4	18.09
8337	BD− 1° 3903		9.1	9.3	5 16.207	3 0068	− .0043	− .0006	− 1 12 38.29	10.419	.382	− .017	4	18.32
8338	BD+31° 3962	F8	8.8	8.76	5 17.487	2.3630	+ .0016	+ .0020	+31 52 8.40	10.421	.289	− .040	5	19.21
8339	BD+ 6° 4456	A0	8.7	9.2	5 19 157	2 9321	− .0021	− .002	+ 7 1 22.50	10 423	.361	.00	4	18.41
8340	BD+26° 4116	B3	7.8	7.60	5 21 004	2.5150	+ .0011	+ .0001	+26 2 25.79	10 426	.309	− .014	4	18.35

8319. $8^{m}6$, $9^{m}3$, $0''6$, 232°.

8322. $9^{m}7$-$10^{m}0$, $1''6$, 102°.

8327. $12^{m}5$, $1''5$, 58°.

8329. $8^{m}6$, $4''4$, 346°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8341	BD+65° 1432	F5	*8.18*	8.62	20 5 28.55	+0.5730	−0.0242	+0.0019	+65 27 54.70	+10.434	+0.067	+0.009	5	19.30
8342	BD−12° 5657	F5	9.45		5 56.068	3.3149	− .0078	− .0015	−11 59 52.36	10.469	.409	− .023	4	18.10
8343	BD+13° 4289		*9.74*		6 1.735	+2.7971	− .0007	+ .002	+13 35 53.47	10.476	+ .344	+ .05	4	18.61
8344	BD+73° 898	Ma	*7.85*	8.10	6 16.31	−0.7045	− .0780	− .0005	+73 13 30.86	10.494	− .092	− .027	4	18.08
8345	b^2 Cygni	B2	4.82	5.10	6 27.287	+2.2274	+ .0017	− .0004	+36 36 12.24	10.507	+ .273	+ .009	[illegible]	18.91
8346	BD+48° 3046	F0	7.19	7.27	20 6 28.059	+1.7785	− .0006	+ .001	+48 40 30.53	+10.508	+ .216	+ .02	[illegible]	18.44
8347	BD+42° 3613		8.7	8.37	6 36.837	2.0109	+ .0011	− .002	+43 1 39.45	10.519	.245	− .04	4	17.98
8348	BD+60° 2089		*8.73*	9.2	6 45.56	1.0305	− .0124	− .002	+60 53 28.97	10.530	.123	.00	4	18.29
8349	BD− 4° 5042	K0	7.8	7.7	6 52.418	3.1485	− .0050	− .0002	− 3 48 43.06	10.539	.386	+ .029	4	18.06
8350	BD−16° 5525	F2	9.2	ft.	6 55.095	3.4008	− .0095	− .004	−16 6 10.01	10.542	.418	− .02	5 4	17.77 18.51
8351	θ Aquilæ	A0	3.37	3.50	20 7 10.668	+3.0937	− .0043	+ .0021	− 1 3 34.98	+10.561	+ .379	+ .003	110 89	19.30 19.69
8352	BD+45° 3074	K5	*9.56*		7 11.662	1.9149	+ .0005	− .002	+45 32 59.57	10.562	.232	− .02	4	18.65
8353	BD+29° 3926	A5	7.71	7.80	7 18.714	2.4162	+ .0016	− .0006	+30 2 10.52	10.571	.295	+ .001	[illegible]	18.08
8354	BD+57° 2149	M0	*8.15*	7.88	7 23.037	1.2502	− .0079	+ .001	+58 4 55.68	10.576	.150	− .01	4	17.64
8355	BD+16° 4177	F2	8.1	7.46	7 36.221	2.7342	− .0002	+ .005	+16 36 53.52	10.593	.334	.00	4	17.99
8356	CD−26° 14857		9.2		20 7 57.958	+3.6452	− .0151	− .0041	−26 47 54.24	+10.620	+ .447	− .040	4	18.72
8357	Brad 2577	F5	5.88	5.80	7 58.470	3.3313	− .0083	+ .0128	−12 51 9.84	10.620	.408	− .193	4	17.93
8358	BD+40° 4048	Ma	9.0	8.9	8 6.712	+2.1064	+ .0015	.000	+40 27 44.93	10.630	+ .256	− .03	[illegible]	18.50
8359	BD+71° 1003		*8.15*	8.52	8 32.24	−0.2686	− .0581	+ .0070	+71 17 24.03	10.662	− .038	− .010	4	18.76
8360	BD+37° 3814	F5	*9.39*	9.3	8 32.736	+2.1945	+ .0016	+ .004	+37 48 47.41	10.663	+ .267	+ .04	4	17.67
8361	BD+63° 1603	F8	*9.18*	9.3	20 8 38.48	+0.7409	− .0200	+ .0026	+64 7 7.90	+10.670	+ .087	+ .016	[illegible]	18.91
8362	BD+52° 2644	K5	*8.62*	8.58	8 38.572	1.5997	− .0025	+ .002	+52 28 32.25	10.670	.193	+ .02	[illegible]	18.73
8363	20 Vulpeculæ	B8	5.91	6.15	8 39.387	2.5151	+ .0012	− .0003	+26 14 20.93	10.671	.306	− .016	4	18.82
8364	BD+22° 3960	A2	*9.38*		8 44.307	2.6110	+ .0007	.000	+22 12 31.60	10.677	.318	− .01	4	18.07
8365	BD+33° 3798	K0	*9.02*	8.94	8 53.581	2.3141	+ .0018	+ .003	+33 51 43.87	10.688	.281	+ .04	4 5	19.03 19.16
8366	BD− 6° 5408	A3	9.4		20 8 58.751	+3.1918	− .0058	+ .002	− 6 0 50.40	+10.695	+ .389	+ .01	4	18.02
8367	BD+ 5° 4446	G0	9.06	8.7	9 3.302	2.9677	− .0025	+ .0025	+ 5 18 25.38	10.700	.361	+ .014	5	17.77
8368	66 Aquilæ	K2	5.64	5.31	9 6.045	3.0974	− .0044	+ .0012	− 1 15 0.04	10.704	.378	− .024	6	19.26
8369	BD−18° 5624	G5	8.0	8.25	9 24.355	3.4377	− .0106	+ .0080	−17 55 5.30	10.726	.419	+ .005	[illegible]	17.77
8370	BD+17° 4257	K2	*8.01*	8.39	10 5.605	2.7081	+ .0001	− .002	+17 55 55.79	10.777	.329	.00	[illegible]	17.44
8371	BD+ 0° 4448	F5	*8.56*	8.08	20 10 10.666	+3.0631	− .0039	− .0012	+ 0 29 20.62	+10.783	+ .372	− .048	4	18.12
8372	68 Draconis	F5	5.72	5.26	10 16.35	0.9692	− .0142	+ .0188	+61 50 9.69	10.790	.115	+ .080	4	18.68
8373	Grmb 3087 *br.*	K2	6.35	5.8	10 18.189	1.6710	− .0016	− .0007	+51 13 20.12	10.793	.201	− .024	4	18.05
8374	CD−28° 16524	K0	8.3	8.44	10 31.181	3.6895	− .0166	− .0004	−28 43 27.58	10.808	.448	.000	[illegible]	18.42
8375	ρ Aquilæ	A0	4.96	5.5	10 34.498	2.7722	− .0004	+ .0036	+14 57 10.91	10.813	.336	+ .051	4	18.82
8376	Grmb 3112	B3	6.79	7.2	20 10 35.52	+0.2833	− .0354	− .0037	+68 1 54.00	+10.814	+ .030	− .001	12	19.09
8377	o^1 Cygni	A2	4.96	5.03	10 47.104	1.8846	+ .0003	+ .0014	+46 34 22.84	10.828	.226	− .009	[illegible]	18.81
8378	BD− 7° 5228	K5	8.5	8.50	10 57.668	3.2244	− .0065	− .001	− 7 41 2.82	10.841	.390	+ .05	[illegible]	17.76
8379	o^2 Cygni	*	3.95	4.10	11 6.705	+1.8888	+ .0004	+ .0002	+46 29 53.23	10.852	+ .227	+ .001	[illegible]	17.85
8380	Grmb 3212	A2	6.61	6.83	11 12.29	−8.4618	−1.0802	− .0075	+84 26 16.50	10.859	−1.041	− .042	10	18.44
8381	BD+34° 3934	A2	8.42	8.9	20 11 23.125	+2.2818	+ .0018	− .001	+35 9 46.42	+10.872	+ .274	+ .04	4	17.39
8382	CD−25° 14647	G0	8.7	8.4	11 23.313	3.6069	− .0146	+ .0042	−25 26 53.92	10.872	.437	− .032	[illegible]	18.44
8383	33 Cygni	A3	4.32	4.43	11 32.297	+1.3886	− .0057	+ .0073	+56 19 21.00	10.883	+ .165	+ .082	4	18.53
8384	κ Cephei *br.*	B9	4.43	4.69	11 36.65	−1.9762	− .1688	+ .0038	+77 28 16.25	10.889	− .246	+ .026	8	18.53
8385	BD+13° 4332	*	7.9	7.78	11 43.627	+2.8054	− .0008	− .001	+13 24 10.83	10.897	+ .338	.00	4	17.62
8386	BD−10° 5333	K5	8.46	7.81	20 11 49.167	+3.2670	− .0073	− .0002	− 9 49 55.00	+10.904	+ .395	+ .004	4	17.86
8387	BD+78° 703		*8.86*	8.9	12 2.10	−2.7832	− .2406	− .0025	+79 9 59.07	10.920	− .345	+ .019	5	18.19
8388	Wi (1) 20^h 199	G5	6.57	6.60	12 7.246	+2.9878	− .0029	− .0036	+ 4 20 9.47	10.926	+ .360	− .050	4	18.14
8389	BD+10° 4230		9.1	9.3	12 19.218	2.8578	− .0013	− .002	+10 51 50.00	10.941	.344	.00	4 5	18.83 17.96
8390	BD+18° 4439		*9.53*	8.9	12 24.360	2.6907	+ .0003	− .001	+18 50 26.74	10.947	.324	+ .01	[illegible]	18.58
8391	BD−21° 5672	Nb	Var.	6.64	20 12 25.631	+3.5151	− .0126	+ .0006	−21 33 53.49	+10.949	+ .425	+ .011	4	18.43
8392	BD−11° 5285	G5	8.8	8.7	12 33.100	3.2947	− .0079	− .0109	−11 13 21.09	10.958	.398	− .304	[illegible]	19.47
8393	CD−29° 16940	Mb	8.1		12 39.899	3.7093	− .0175	+ .0005	−29 38 30.60	10.966	.448	− .015	4	18.25
8394	BD+62° 1796	F2	*8.50*	9.18	12 41.77	0.8843	− .0167	− .0021	+62 55 39.45	10.968	.103	− .017	4	18.11
8395	BD− 1° 3937 *m.*		9.3		12 48.666	3.1065	− .0046	− .0007	− 1 43 55.83	10.977	.374	+ .009	4	18.14
8396	BD+36° 3973	K2	*8.65*	8.25	20 13 3.055	+2.2435	+ .0018	.000	+36 34 41.19	+10.994	+ .269	− .04	5	18.24
8397	BD−13° 5630	K0	8.5	7.89	13 8.242	3.3323	− .0087	+ .0013	−13 4 59.41	11.001	.402	− .035	4	17.93
8398	α^1 Capricorni	G0	4.55	4.24	13 12.956	3.3256	− .0086	+ .0010	−12 45 23.28	11.006	.401	+ .006	5 4	15.77 16.08
8399	4 Capricorni	K0	5.96	5.82	13 19.564	3.5251	− .0130	+ .0023	−22 3 28.72	11.014	.424	− .034	4	19.17
8400	BD+ 1° 4248 *br.*	F0	8.52	8.45	13 21.036	3.0487	− .0037	− .0011	+ 1 13 51.93	11.016	.367	− .018	[illegible]	18.09

8373. 11^{m}5, 4″1, 79°
8379. K0, B8.

8384. 8^{m}4, 7″4, 123°.
8385. G0, A.

8395. 9^{m}8 10^{m}3, 0″2, 328°.
8400. 11^{m}3, 4″3, 300°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8401	24 Vulpeculæ	K0	5.45	5.38	20 13 21.632	+ 2.5657	+0.0011	+0.0013	+24 25 26.01	+11.017	+0.308	−0.020	4	18.06
8402	BD+15° 4120	B9	7.34	7.68	13 28.903	2.7606	− .0003	− .001	+15 37 29.49	11.026	.331	− .02	4	18.04
8403	α² Capricorni *br.*	G5	3.77	3.57	13 37.050	3.3260	− .0086	+ .0040	−12 47 37.75	11.036	.401	+ .005	101 80	19.86 19.75
8404	BD+53° 2376	K5	*9.05*		13 48.788	1.5469	− .0033	+ .003	+53 50 35.47	11.050	.183	− .02	4	18.50
8405	BD+43° 3550		8.3	8.80	13 50.120	2.0104	+ .0012	.000	+43 36 56.34	11.052	.240	− .03	5	17.56
8406	BD+ 6° 4493		10.5	ft.	20 13 56.584	+ 2.9495	− .0023	+ .001	+ 6 18 28.56	+11.059	+ .354	− .02	4	18.52
8407	CD−23° 16135	A3	9.9		14 14.316	3.5529	− .0137	− .0020	−23 19 37.85	11.081	.427	.000	4	18.59
8408	BD+49° 3244	A2	8.52	8.9	14 30.241	1.7402	− .0010	.000	+50 8 7.55	11.100	.206	− .01	4	18.39
8409	σ Capricorni	K0	5.46	5.80	14 46.786	3.4636	− .0116	+ .0004	−19 22 8.80	11.120	.416	− .009	4	18.03
8410	BD+21° 4147	A3	7.46	7.48	15 4.736	2.6403	+ .0008	.000	+21 16 11.37	11.142	.314	+ .02	4	17.72
8411	BD+29° 3984	A0	8.36	8.70	20 15 10.823	+ 2.4285	+ .0017	+ .0009	+30 7 0.55	+11.150	+ .290	+ .030	4	18.04
8412	BD− 3° 4848	F8	8.4	8.44	15 14.655	3.1383	− .0052	− .0007	− 3 22 57.47	11.154	.376	− .026	4	17.95
8413	BD+ 6° 4500	K0	8.6	8.49	15 23.174	2.9335	− .0022	− .005	+ 7 8 55.94	11.164	.351	− .02	4	18.43
8414	Brad 2616	F5	5.18	5.30	15 34.654	2.3037	+ .0020	+ .0012	+34 43 55.20	11.178	.274	− .007	4	17.66
8415	BD+11° 4217		8.4	8.47	15 39.960	2.8393	− .0011	− .002	+11 53 7.17	11.185	.338	− .01	4	17.68
8416	Cape (80) 10881	K2	6.51		20 15 42.235	+ 3.8762	− .0229	+ .0027	−35 55 36.78	+11.188	+ .465	+ .030	4	19.06
8417	BD− 5° 5228	K0	9.8		15 47.829	3.1837	− .0060	+ .001	− 5 43 2.98	11.194	.380	+ .01	4	18.10
8418	Lal 39042	K5	6.66	6.62	16 10.634	3.2011	− .0063	− .0050	− 6 36 45.07	11.222	.382	− .079	4	18.25
8419	BD+68° 1114		*9.12*	9.2	16 11.11	0.1909	− .0410	+ .0007	+68 58 51.89	11.223	.018	− .039	4	17.73
8420	BD+58° 2085	K5	*9.23*		16 21.173	1.2314	− .0089	+ .005	+58 59 29.36	11.235	.144	+ .03	4	18.46
8421	BD−15° 5628	K0	8.0	7.62	20 16 28.871	+ 3.3833	− .0099	+ .0003	−15 40 54.76	+11.244	+ .406	− .003	4 5	18.59 17.77
8422	BD+52° 2676	K2	*9.70*	8.7	16 29.158	1.6040	− .0026	+ .002	+53 0 38.40	11.244	.189	− .01	4	18.58
8423	β Capricorni	*	3.25	3.48	16 31.095	3.3698	− .0096	+ .0024	−15 2 5.99	11.247	.401	+ .001	4	18.60
8424	BD+40° 4116	B9	7.7	7.67	16 32.029	2.1064	+ .0017	− .005	+41 8 20.74	11.248	.249	.00	4	18.01
8425	Wi (1) 20^{h} 334	G5	6.34	6.34	16 37.231	2.7905	− .0005	− .0007	+14 18 57.80	11.254	.331	− .001	5	19.11
8426	BD+31° 4036		*9.27*	9.1	20 16 39.329	+ 2.3969	+ .0018	+ .0012	+31 25 53.52	+11.257	+ .284	+ .006	4	17.78
8427	BD+24° 4091	K2	*9.53*	9.1	16 47.779	2.5736	+ .0011	.000	+24 18 7.66	11.267	.305	+ .01	4	17.70
8428	BD−17° 5951	K2	8.8	8.74	16 50.220	+ 3.4204	− .0108	.000	−17 27 46.27	11.269	+ .408	− .02	4	18.10
8429	BD+87° 187	K2	8.04	7.94	17 12.96	−24.420	−7.073	+ .012	+87 42 2.38	11.297	−2.945	− .022	6	17.79
8430	176 B Cygni *m.*	A0	6.20	6.08	17 21.200	+ 2.1744	+ .0019	− .0007	+39 9 0.97	11.307	+ .256	− .020	4	19.03
8431	BD+38° 4026		*9.00*	8.1	20 17 28.771	+ 2.1883	+ .0019	− .001	+38 43 17.76	+11.316	+ .258	+ .01	4	17.84
8432	BD+48° 3095		8.8		17 38.135	1.8190	− .0001	+ .003	+48 40 19.46	11.327	.215	.00	4	17.68
8433	BD+27° 3703	A0	*8.49*	8.40	17 50.166	2.5049	+ .0016	− .0029	+27 15 45.53	11.342	.295	− .009	4	17.88
8434	BD+ 8° 4414	A0	7.7	8.04	17 54.937	2.9127	− .0019	− .002	+ 8 15 50.64	11.348	.345	− .01	4	17.89
8435	BD+19° 4380	F8	*8.3*	7.81	18 0.511	2.6883	+ .0005	.000	+19 14 21.27	11.354	.317	+ .02	4	17.88
8436	BD− 9° 5445	A3	7.92	7.65	20 18 15.238	+ 3.2486	− .0073	+ .002	− 9 4 53.12	+11.372	+ .385	+ .01	4	17.68
8437	BD−11° 5313	K0	9.0	8.56	18 49.141	3.2890	− .0080	+ .0028	−11 8 24.81	11.413	.389	+ .014	4	18.04
8438	CD−24° 16008	G0	10.6		18 54.189	3.5764	− .0148	− .0022	−24 38 4.05	11.418	.424	− .016	5 4	17.84 18.59
8439	BD+ 2° 4148	K5	*8.63*	8.3	18 55.415	3.0126	− .0034	− .0015	+ 3 7 51.38	11.420	.356	− .034	4	17.97
8440	BD+28° 3719	F5	*8.25*	8.60	19 2.625	2.4683	+ .0018	− .0004	+28 50 0.37	11.429	.291	+ .040	4	17.71
8441	Wi (2) 20^{h} 600	K2	7.10	7.11	20 19 9.514	+ 2.5365	+ .0015	− .0001	+26 2 29.97	+11.437	+ .299	− .011	4	17.41
8442	CD−27° 14775	G0	8.7		19 14.138	+ 3.6520	− .0169	+ .0017	−27 49 52.59	11.443	+ .432	− .132	4	17.89
8443	BD+73° 903	G0	*9.12*		19 18.21	− 0.5987	− .0820	+ .0016	+73 21 54.00	11.447	− .076	− .006	5	19.63
8444	γ Cygni	F8	2.32	2.67	19 21.368	+ 2.1524	+ .0019	+ .0001	+39 59 59.93	11.451	+ .252	− .003	9	20.05
8445	BD+10° 4264	A2	7.7	7.66	19 26.630	2.8630	− .0013	.000	+10 49 40.41	11.457	.338	.00	4	17.52
8446	BD+54° 2336	K5	*8.57*	8.95	20 19 37.725	+ 1.5093	− .0040	+ .003	+54 58 12.27	+11.471	+ .175	− .01	4	17.77
8447	BD− 1° 3971	K0	7.9	7.56	20 1.970	3.0885	− .0045	+ .0010	− 0 49 33.63	11.500	.364	− .029	4	18.00
8448	Grmb 3157 *br.*	K0	6.33	6.33	20 10.043	2.0622	+ .0016	+ .0049	+42 43 29.04	11.509	.241	+ .041	4	17.93
8449	BD−19° 5809	K0	6.88	6.80	20 27.489	3.4640	− .0121	+ .0023	−19 41 37.59	11.530	.408	+ .009	4	17.65
8450	Lac 8433	K0	5.97	5.6	20 33.164	3.6766	− .0176	+ .0009	−28 55 25.92	11.537	.433	+ .005	4	17.52
8451	BD+ 0° 4496	K5	6.81	6.56	20 20 37.681	+ 3.0516	− .0039	+ .0004	+ 1 6 33.50	+11.542	+ .359	− .025	5	17.42
8452	BD+67° 1241	F8	*8.76*	9.2	20 40.10	0.4310	− .0331	+ .0049	+67 32 0.15	11.545	.046	− .022	4	18.22
8453	BD−21° 5716	K2	6.8		20 48.018	3.5010	− .0131	− .0020	−21 25 4.04	11.555	.412	+ .028	4	18.52
8454	BD+46° 2927	B8	*8.2*	8.55	21 4.720	1.9322	+ .0009	− .004	+46 16 7.80	11.575	.225	.00	5 4	18.80 20.18
8455	BD+39° 4167	G0	8.7	8.60	21 11.252	2.1549	+ .0020	+ .002	+40 4 48.13	11.582	.251	.00	4	17.75
8456	BD+57° 2185	M0	*8.25*	8.60	20 21 20.081	+ 1.3768	− .0063	+ .004	+57 16 1.55	+11.593	+ .159	− .02	4	17.93
8457	BD+59° 2222	F8	*8.55*	8.76	21 36.440	+ 1.2221	− .0095	+ .004	+59 31 8.08	11.612	+ .140	− .02	4	18.40
8458	BD+80° 652	K0	*7.92*	7.6	21 42.60	− 3.7196	− .3708	− .0080	+80 53 31.51	11.620	− .447	− .018	4	17.46
8459	BD−14° 5742	K2	8.4	7.68	21 49.546	+ 3.3403	− .0064	− .0028	−13 48 45.77	11.628	+ .391	− .003	4	18.22
8460	BD+32° 3817		*9.64*		21 56.726	2.3674	+ .0021	+ .001	+32 57 9.30	11.636	.276	.00	4	17.45

8403. 11^{m}, 7″.2, 156°.

8423. G0, A0.

8430. 6^{m}3–8^{m}3, 0″.2, 120°; 9^{m}3, 3″.5, 282°.

8448. 11^{m}0, 1″.2, 24°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8461	BD+ 5° 4506		9.1		20 21 59.967	+2.9618	−0.0026	−0.002	+ 5 49 12.61	+11.640	+0.347	+0.02	[illegible]	19.38
8462	Wi (2) 20ʰ 706	K0	6.17	6.29	22 43.866	2.7398	.0000	− .0006	+17 3 10.64	11.692	.319	− .005	4	17.69
8463	π Capricorni *br.*	B8	5.24	5.2	22 44.648	3.4354	− .0116	+ .0007	−18 28 29.24	11.693	.402	− .013	5	17.50
8464	Lac 8457	F8	6.56	6.56	23 13.715	3.5983	− .0158	+ .0005	−25 52 17.05	11.727	.421	+ .026	4	18.01
8465	BD−18° 5686	K0	9.0		23 17.133	3.4315	− .0116	.000	−18 19 8.51	11.732	.401	− .01	[illegible]	18.28
8466	BD+35° 4118	G5	*8.36*	7.92	20 23 18.112	+2.2876	+ .0022	− .001	+35 55 40.20	+11.733	+ .265	+ .02	4 5	18.28 17.52
8467	BD+25° 4237	A2	8.01	8.25	23 18.314	2.5623	+ .0014	+ .0018	+25 13 30.05	11.733	.299	− .008	[illegible]	17.49
8468	BD+47° 3106		9.0	7.63	23 27.088	1.8823	+ .0006	+ .003	+47 42 19.88	11.743	.217	− .02	4	18.12
8469	BD+41° 3749		9.3	9.3	23 39.022	2.1133	+ .0019	+ .002	+41 33 23.60	11.758	.244	+ .02	4	18.50
8470	BD+20° 4571	K0	6.64	6.38	23 40.177	2.6742	+ .0006	+ .001	+20 12 45.36	11.759	.310	− .01	4	17.87
8471	BD+29° 4038	A0	7.21	7.17	20 23 42.334	+2.4453	+ .0020	+ .0021	+30 6 20.46	+11.761	+ .284	− .013	[illegible]	18.04
8472	BD+12° 4341	K0	7.9	7.76	23 43.274	2.8321	− .0009	.000	+12 32 2.54	11.762	.329	+ .01	4	18.06
8473	BD− 5° 5275	K0	8.0	7.35	23 44.963	3.1739	− .0061	− .0008	− 5 20 37.75	11.764	.370	+ .003	4	17.88
8474	BD+53° 2405	K2	*8.27*	8.13	24 11.610	1.6112	− .0026	+ .003	+53 31 34.84	11.796	.185	.00	4	18.38
8475	Lal 39389	K0	6.26	6.12	24 13.926	2.9176	− .0020	+ .0018	+ 8 10 18.82	11.799	.339	+ .018	[illegible]	17.93
8476	ρ Capricorni *br.*	F0	5.06	4.99	20 24 17.955	+3.4253	− .0115	− .0010	−18 4 44.50	+11.803	+ .398	− .022	4	17.90
8477	Grmb 3191 *br.*	A0	6.33	6.08	24 27.575	1.4494	− .0052	+ .0027	+56 22 28.32	11.815	.165	+ .006	4	17.76
8478	BD−15° 5683	K0	8.4	8.6	24 33.447	3.3685	− .0102	+ .0030	−15 19 35.49	11.822	.392	− .004	[illegible]	18.12
8479	40 Cygni	A0	5.45	5.78	24 36.364	2.2243	+ .0022	− .0016	+38 10 36.93	11.825	.257	− .071	4	18.12
8480	Pi 20ʰ 146	K5	6.22	5.97	24 49.876	+3.5228	− .0141	+ .0009	−22 39 27.92	11.841	+ .409	− .026	4	18.36
8481	BD+77° 776		*9.36*		20 24 51.67	−1.9073	− .1849	+ .0028	+77 47 2.70	+11.843	− .229	− .030	[illegible]	17.87
8482	BD+23° 4030	A2	*9.59*		25 10.704	+2.5975	+ .0012	+ .001	+23 48 28.21	11.865	+ .300	+ .02	[illegible]	18.15
8483	BD+ 4° 4460	A0	*9.04*		25 21.677	2.9914	− .0030	− .0011	+ 4 19 17.18	11.878	.346	− .002	[illegible]	17.42
8484	BD+28° 3764	A7	9.0		25 24.757	2.4932	+ .0018	− .0009	+28 17 59.45	11.882	.287	+ .008	3	16.70
8485	69 Aquilæ	K0	5.11	4.74	25 28.170	3.1320	− .0054	+ .0042	− 3 9 8.69	11.886	.363	− .021	4	17.88
8486	BD+44° 3474		9.3	8.4	20 25 31.281	+2.0078	+ .0015	+ .005	+44 42 23.69	+11.890	+ .230	− .01	4	18.02
8487	BD− 7° 5310	K0	9.8		25 33.441	3.2085	− .0068	+ .003	− 7 11 33.97	11.892	.374	+ .01	4	18.16
8488	BD+15° 4173		*9.08*	8.7	25 35.629	2.7766	− .0003	− .002	+15 23 28.58	11.895	.320	+ .02	[illegible]	18.08
8489	BD+33° 3917		9.1	8.72	25 35.980	2.3439	+ .0023	+ .003	+34 7 16.85	11.895	.270	.00	[illegible]	17.97
8490	BD−17° 5999	G5	9.2		25 38.993	3.4077	− .0113	+ .0041	−17 18 1.22	11.899	.396	− .072	4	18.28
8491	BD+ 9° 4551	K0	6.79	6.94	20 26 4.567	+2.8827	− .0015	+ .001	+10 2 3.70	+11.929	+ .333	− .01	5	18.32
8492	41 Cygni	F5	4.09	4.44	26 7.550	2.4502	+ .0020	+ .0007	+30 6 3.24	11.932	.282	− .004	11	20.99
8493	42 Cygni	A0	5.94	5.97	26 17.219	2.2876	+ .0023	+ .0009	+36 11 13.25	11.943	.262	− .008	[illegible]	18.55
8494	BD+60° 2127		*8.52*	8.6	26 30.86	1.1686	− .0111	+ .002	+60 36 39.28	11.959	.132	.00	[illegible]	17.73
8495	BD− 0° 4026		8.9	8.8	26 44.449	3.0863	− .0046	+ .0025	− 0 43 38.57	11.975	.356	− .028	5	19.28
8496	BD+22° 4082	K0	*8.90*	9.1	20 26 55.145	+2.6186	+ .0012	− .001	+22 58 27.59	+11.988	+ .301	− .01	4	17.64
8497	BD+18° 4519	A2	8.7	8.63	26 58.335	2.7190	+ .0004	+ .002	+18 16 49.49	11.992	.312	+ .01	4	18.76
8498	CD−27° 14861	G0	9.7		27 1.853	+3.6225	− .0170	.0000	−27 10 51.28	11.996	+ .418	+ .032	5	19.04
8499	BD+71° 1018		*9.30*	9.3	27 20.85	−0.2424	− .0672	− .0095	+72 7 7.87	12.018	− .033	− .006	[illegible]	17.66
8500	ω² Cygni	B3	4.89	4.97	27 34.780	+1.8570	+ .0004	+ .0009	+48 40 55.44	12.034	+ .212	+ .004	4	18.82
8501	BD+42° 3767		9.0	8.9	20 27 45.607	+2.0948	+ .0020	− .002	+42 28 37.12	+12.047	+ .239	.00	5	17.59
8502	BD+ 6° 4554		8.9	8.67	27 48.575	2.9536	− .0025	− .004	+ 6 21 41.43	12.050	.339	+ .02	4	17.45
8503	Pi 20ʰ 174 *br.*	G5	5.81	5.96	28 1.131	3.2633	− .0080	+ .0205	−10 7 38.29	12.065	.375	+ .092	4	18.17
8504	BD+32° 3847	A3	8.2	8.40	28 3.394	2.3992	+ .0023	− .001	+32 15 30.38	12.067	.274	+ .01	4	17.79
8505	BD− 8° 5387	K0	8.7	8.55	28 7.688	3.2315	− .0074	− .001	− 8 28 3.87	12.072	.371	.00	4	18.36
8506	BD+14° 4334		8.6	8.7	20 28 14.032	+2.7981	− .0005	− .002	+14 26 23.52	+12.080	+ .321	+ .03	[illegible]	17.69
8507	θ Cephei	A5	4.28	4.4	28 14.47	1.0044	− .0156	+ .0066	+62 43 29.75	12.081	.112	− .018	4	18.39
8508	BD−21° 5752	A5	8.4		28 47.622	3.4850	− .0134	.0000	−21 10 11.83	12.119	.401	+ .002	4	17.87
8509	Brad 2647	Ma	5.57	5.60	28 50.627	1.8506	+ .0003	+ .0010	+48 56 59.15	12.122	.210	− .036	[illegible]	18.45
8510	BD− 2° 5303	A0	9.2	8.76	28 54.076	3.1174	− .0052	+ .0002	− 2 24 19.33	12.126	.357	− .010	4	18.31
8511	CD−29° 17159	A3	6.93	6.9	20 28 55.580	+3.6763	− .0188	+ .0035	−29 33 57.72	+12.128	+ .422	− .010	4	17.52
8512	BD+36° 4114		*9.07*	9.5	29 6.648	+2.2849	+ .0025	− .001	+36 32 6.56	12.141	+ .259	− .03	4	18.01
8513	BD+75° 742	F0	9.22	9.21	29 18.47	−1.1550	− .1288	+ .0038	+75 53 27.69	12.155	− .139	− .003	4	17.70
8514	ε Delphini	B5	3.98	4.05	29 23.456	+2.8656	− .0013	+ .0006	+11 1 50.16	12.160	+ .327	− .026	121 104	19.14 19.17
8515	BD−13° 5700	F8	9.6		29 23.712	3.3178	− .0094	+ .0030	−12 59 30.57	12.161	.379	+ .045	[illegible]	17.58
8516	BD+26° 3930	A2	*8.90*	9.3	20 29 55.840	+2.5281	+ .0018	+ .0019	+27 11 1.08	+12.198	+ .288	+ .027	5	17.41
8517	BD−15° 5717	K2	8.0	7.88	29 57.911	3.3599	− .0104	.0000	−15 9 13.96	12.200	.384	− .018	5 6	19.00 18.25
8518	Wi (1) 20ʰ 639	K0	6.68	6.17	30 1.000	2.9870	− .0030	+ .0007	+ 4 37 28.51	12.204	.340	− .010	4	18.04
8519	BD+68° 1133	F8	*8.12*	8.4	30 11.47	0.3157	− .0409	+ .0086	+68 58 42.36	12.216	.031	+ .027	4	18.15
8520	BD+46° 2966	K0	Var.	9.1	30 17.170	1.9633	+ .0014	+ .0078	+46 19 39.97	12.222	.221	− .014	4	18.14

8463. $8^{m}8$, $3''2$, 145°.
8476. $7^{m}5$, $2''7$, 172°.

8477. $8^{m}6$, $26''$, 118°.
8503. $11^{m}7$, $4''6$, 26°.

8520. $8^{m}6$ to $9^{m}9$.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8521	Grmb 3241	K2	6.42	6.35	20 30 22.00	−0.2374	−0.0687	−0.0002	+72 15 38.88	+12.227	−0.033	−0.025	9	18.47
8522	BD+19° 4450	Mb	7.6	7.4	30 39.963	+2.7032	+ .0007	.000	+19 15 19.47	12.249	+ .306	+ .02	4	17.58
8523	BD−19° 5856	K5	9.4		30 47.659	3.4444	− .0125	− .0025	−19 22 10.63	12.258	.392	+ .039	4	18.84
8524	BD+50° 3124	B3	8.75		31 4.100	1.7954	− .0001	+ .001	+50 24 31.52	12.277	.202	− .03	4	17.59
8525	BD− 6° 5527	F2	8.6	8.80	31 8.949	3.1943	− .0068	.000	− 6 33 56.69	12.282	.363	+ .01	5	19.07
8526	BD+52° 2746	K5	7.64	7.16	20 31 10.867	+1.6951	− .0014	− .0005	+52 31 45.60	+12.284	+ .190	− .021	4	17.91
8527	ζ Delphini	A2	4.69	5.03	31 34.063	2.8020	− .0004	+ .0026	+14 23 50.91	12.311	.317	+ .004	4	18.65
8528	CD−23° 16370	K	9.1	8.4	31 42.522	3.5199	− .0147	+ .0002	−22 59 18.46	12.321	.400	− .023	4	17.51
8529	CD−27° 14920	F8	9.1		32 12.866	3.6156	− .0175	+ .0034	−27 17 21.55	12.356	.409	− .059	5	18.84
8530	BD+47° 3144		9.1		32 23.063	+1.8964	+ .0008	.000	+48 12 11.04	12.367	+ .212	.00	4	17.66
8531	73 Draconis	A2	5.18	5.48	20 32 34.73	−0.7639	− .1036	+ .0027	+74 40 50.33	+12.381	− .093	− .012	9	17.79
8532	BD+ 8° 4472	A0	8.14	7.9	32 48.452	+2.9192	− .0019	− .002	+ 8 18 59.36	12.397	+ .329	+ .02	4	17.48
8533	BD+ 1° 4328	F0	9.14	8.8	32 50.710	3.0480	− .0040	− .0008	+ 1 20 56.81	12.399	.344	+ .005	4	17.40
8534	BD+37° 3988	Ma	8.8	8.50	32 53.718	2.2716	+ .0027	− .001	+37 20 45.57	12.402	.255	+ .02	4	17.95
8535	BD+33° 3964	A0	8.94	8.75	33 2.127	2.3664	+ .0026	+ .001	+33 56 46.58	12.412	.265	+ .02	6	20.25
8536	BD+26° 3937	G5	Var.	8.63	20 33 7.644	+2.5537	+ .0018	− .0023	+26 19 32.24	+12.419	+ .287	− .016	4	17.51
8537	75 Draconis	K0	5.62	5.25	33 19 39	−3.6598	− .4038	+ .0122	+81 8 59.61	12.432	− .423	+ .013	8	18.58
8538	BD+43° 3663		9.1		33 23.290	+2.0695	+ .0022	+ .001	+43 44 54.90	12.437	+ .231	− .02	5 4	17.75 18.23
8539	BD+21° 4285	K2	8.2	8.4	33 26.349	2.6644	+ .0010	− .001	+21 17 25.56	12.440	.298	− .02	4	17.49
8540	BD+ 6° 4592	A2	7.5	7.27	33 37.128	2.9586	− .0025	.000	+ 6 13 16.91	12.452	.332	− .01	4	18.00
8541	BD+50° 3142	K0	9.12	9.2	20 33 40.028	+1.7702	− .0004	+ .001	+51 12 20.33	+12.456	+ .197	− .06	4	18.14
8542	BD+61° 2032	K0	7.77	7.60	33 42.61	1.0882	− .0139	+ .022	+62 11 16.11	12.457	.119	+ .14	5	19.49
8543	β Delphini m.	F5	3.72		33 47.826	2.8056	− .0004	+ .0074	+14 18 58.24	12.464	.315	− .037	4	18.01
8544	BD+31° 4160	F0	6.38	6.57	34 17.686	2.4389	+ .0024	− .0040	+31 14 32.81	12.499	.272	− .046	4	17.28
8545	CD−24° 16176	Mb	9.5	8.5	34 30.553	3.5512	− .0158	− .0009	−24 37 31.18	12.513	.399	.000	5 6	18.21 17.62
8546	BD−17° 6046	F8	7.12	7.16	20 34 32.894	+3.3887	− .0114	+ .0090	−16 50 25.68	+12.516	+ .381	− .027	6	18.88
8547	Wi (1) 20h 799	K0	6.62	7.27	34 52.582	3.1678	− .0064	− .0008	− 5 12 41.21	12.538	.355	+ .018	4	18.06
8548	29 Vulpeculæ	A0	4.78	5.14	34 56.887	2.6742	+ .0010	+ .0041	+20 55 10.94	12.543	.298	− .001	4	18.81
8549	θ Delphini	K5	6.06	5.83	34 57.436	2.8314	− .0007	− .0006	+13 2 0.71	12.544	.316	− .018	4	18.22
8550	Brad 2668	B5	5.04	5.4	35 2.770	2.6124	+ .0015	− .0002	+23 50 4.63	12.550	.292	− .011	4	18.43
8551	BD+69° 1116 m.	A	9.09	9.4	20 35 4.63	+0.1744	− .0494	− .0016	+70 13 37.51	+12.552	+ .015	− .010	4	18.63
8552	BD− 8° 5423	F5	8.5	8.4	35 5.181	3.2307	− .0077	− .002	− 8 37 19.49	12.553	.361	+ .03	4	18.44
8553	κ Delphini	G5	5.23	5.44	35 14.574	2.8928	− .0016	+ .0213	+ 9 48 13.42	12.563	.325	+ .012	4	18.45
8554	CD−29° 17237 m.	F8	8.61		35 17.108	3.6535	− .0190	+ .0018	−29 9 16.84	12.566	.409	− .039	4	17.66
8555	BD− 0° 4064	K0	5.39	5.28	35 18.914	3.0690	− .0044	+ .0063	+ 0 12 15.58	12.568	.343	− .014	4	18.63
8556	Lac 8517	K2	5.54		20 35 18.926	+3.7674	− .0228	+ .0031	−33 42 56.83	+12.568	+ .422	+ .007	4	18.93
8557	υ Capricorni	Ma	5.33	5.69	35 29.857	3.4192	− .0123	− .0020	−18 25 16.52	12.580	.383	− .021	4	18.15
8558	BD+55° 2441	F0	9.12	9.4	35 51.527	1.5236	− .0041	− .002	+56 8 56.54	12.605	.167	.00	5 4	17.19 18.07
8559	α Delphini	B8	3.86	3.90	35 55.303	2.7821	− .0001	+ .0044	+15 37 44.75	12.609	.310	− .008	114 98	19.29 19.24
8560	BD+27° 3820	K5	7.85	7.64	36 7.708	2.5253	+ .0021	− .0028	+27 48 21.42	12.624	.281	− .032	5	21.64
8561	BD+38° 4175		9.31	8.9	20 36 9.091	+2.2352	+ .0028	.000	+38 53 54.00	+12.625	+ .247	.00	4	18.78
8562	BD−10° 5470	G5	9.1	8.5	36 9.462	3.2647	− .0085	− .0013	−10 28 44.89	12.626	.364	.000	4	18.61
8563	BD+63° 1641	F8	9.52		36 9.93	0.9559	− .0181	+ .003	+63 52 50.39	12.626	.103	+ .02	4	17.63
8564	BD+45° 3233	B3	6.46	6.77	36 41.174	+2.0227	+ .0020	+ .0007	+45 23 0.60	12.661	+ .223	− .006	5 4	17.49 18.46
8565	Rad (45) 4976	A2	6.16	6.13	37 11.12	−5.7972	− .7750	+ .0132	+83 20 59.11	12.695	− .660	− .026	8	18.50
8566	BD+22° 4146	A0	9.0		20 37 12.639	+2.6363	+ .0014	.0000	+22 52 46.11	+12.697	+ .292	.000	5	17.66
8567	BD−12° 5808	F8	8.2	8.6	37 19.374	3.3042	− .0095	− .0032	−12 37 25.67	12.704	.367	− .003	4	17.52
8568	BD+ 2° 4224		9.20	8.9	37 19.586	3.0260	− .0036	+ .0014	+ 2 35 14.21	12.705	.335	+ .026	4	17.70
8569	BD+64° 1456	F5	9.25	8.9	37 34.75	0.8372	− .0222	+ .0037	+65 12 16.41	12.722	.089	− .017	4	17.74
8570	BD− 2° 5338	F8	8.7	8.42	37 41.474	3.1143	− .0053	− .0020	− 2 18 25.30	12.729	.346	− .039	4	17.70
8571	Brad 2675 br.	•	5.92	5.9	20 37 48.132	+2.4274	+ .0025	+ .0001	+32 1 19.75	+12.737	+ .268	− .018	4	17.80
8572	BD+16° 4346		8.80	8.89	37 56.055	2.7547	+ .0002	+ .003	+17 8 9.30	12.746	.305	+ .01	4	17.52
8573	BD+12° 4432	G5	8.0	7.8	38 6.600	2.8405	− .0008	− .006	+12 41 44.92	12.758	.314	− .07	4	17.42
8574	BD−20° 6008		9.4		38 12.967	3.4538	− .0135	+ .0028	−20 17 52.38	12.765	.383	− .036	5	18.54
8575	BD+46° 3009		9.1	9.3	38 16.045	1.9838	+ .0018	− .008	+46 35 13.26	12.768	.218	.00	4	17.92
8576	BD−22° 5508	K0	9.0		20 38 28.648	+3.4938	− .0147	+ .0009	−22 15 0.70	+12.782	+ .387	+ .024	4	18.21
8577	BD+54° 2397	A0	8.15	8.3	38 30.884	1.6359	− .0021	− .004	+54 23 1.41	12.785	.178	+ .01	4	17.90
8578	BD+ 9° 4616	K2	8.32	7.91	38 30.916	2.8878	− .0014	− .002	+10 11 10.94	12.785	.319	+ .01	4	17.89
8579	BD+36° 4196		9.0	8.8	38 39.819	2.3050	+ .0029	+ .001	+36 44 4.56	12.795	.254	− .01	5	17.48
8580	α Cygni	A2	1.33		38 42.220	2.0444	+ .0022	.0000	+44 59 38.15	12.797	.224	− .001	13	21.18

8536. $8^{m}5$ to $9^{m}8$.
8543. $4^{m}1$-$5^{m}1$, $0''.5$, 341°; 27 yrs.

8551. $9^{m}6$, $10^{m}1$, $0''.4$, 29°.
8554. $9^{m}1$-$9^{m}7$, $0''.8$, 26°.

8571. K0, A, $8^{m}0$, $2''.8$, 48°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8581	BD+21° 4328	A5	*9.25*	8.8	20 39 5.539	+2.6576	+0.0013	−0.001	+22 0 20.22	+12.824	+0.292	+0.02	4	18.05
8582	BD+29° 4146	K2	*8.46*	8.10	39 7.483	+2.4803	+ .0025	− .0008	+29 58 47.83	12.826	+ .273	− .018	4	17.64
8583	Rad (45) 4956	B3	6.78	6.89	39 11.55	−2.2829	− .2500	− .0024	+79 8 51.20	12.831	− .261	+ .013	8	18.42
8584	BD+53° 2466	A0	*8.15*	8.11	39 12.170	+1.6636	− .0017	− .001	+53 55 22.31	12.831	+ .180	− .02	4	17.65
8585	BD− 6° 5568	F0	7.17	7.3	39 42.813	3.1782	− .0068	.000	− 5 52 44.83	12.866	.350	.00	4	18.33
8586	δ Delphini	A5	4.53	4.38	20 39 43.446	+2.8022	− .0002	− .0016	+14 47 12.81	+12.866	+ .307	− .051	4	17.70
8587	BD− 4° 5240	K5	9.1	8.72	39 55.870	3.1515	− .0062	+ .0004	− 4 23 56.35	12.880	.347	− .001	5	18.30
8588	BD−14° 5839	Ma	7.01	6.87	40 6.470	3.3369	− .0104	− .0002	−14 28 31.23	12.892	.367	− .004	[illegible]	17.52
8589	BD+47° 3174		9.3	9.23	40 33.589	1.9570	+ .0016	− .005	+47 31 13.85	12.922	.213	.00	5	19.39
8590	CD−24° 16247	F5	8.9	8.6	40 36.766	3.5310	− .0157	+ .0026	−24 9 55.56	12.926	.388	− .028	4	18.59
8591	BD+39° 4293	F5	8.17	7.95	20 40 40.086	+2.2126	+ .0030	+ .0019	+40 6 17.42	+12.929	+ .241	+ .071	[illegible]	17.69
8592	BD+51° 2932	G0	7.68	7.62	40 40.934	1.7656	− .0003	− .001	+52 0 9.65	12.930	.191	+ .14	4 5	18.45 17.66
8593	BD−16° 5689	K2	9.4		40 44.310	3.3718	− .0114	− .0010	−16 19 36.89	12.934	.370	− .010	[illegible]	17.73
8594	BD+15° 4240		*9.57*	8.9	40 54.552	2.7920	− .0001	− .001	+15 22 51.77	12.946	.305	− .01	4	18.52
8595	Wi (2) 20^{h} 1294	A5	7.07	7.13	41 10.914	2.6977	+ .0009	− .0013	+20 12 0.00	12.964	.295	− .035	4	18.02
8596	BD+42° 3847		*8.77*	8.80	20 41 19.402	+2.1441	+ .0029	+ .004	+42 21 2.02	+12.973	+ .233	.00	5 4	17.66 18.65
8597	ψ Capricorni	F8	4.26	4.63	41 21.754	3.5598	− .0170	− .0042	−25 33 33.76	12.976	.390	− .159	4	18.18
8598	BD+ 6° 4634	A0	8.24	8.42	41 23.891	2.9522	− .0024	− .002	+ 6 44 50.93	12.978	.322	.00	4	18.22
8599	BD− 8° 5468	A3	9.0	8.87	41 31.340	3.2150	− .0075	.000	− 7 57 19.00	12.986	.352	+ .04	5 4	19.28 18.48
8600	CD−29° 17314	A2	9.1	ft.	41 44.843	3.6391	− .0196	+ .0014	−29 6 38.03	13.001	.398	− .018	5	19.71
8601	BD+62° 1854	B5	*7.97*	7.86	20 41 55.40	+1.0848	− .0149	− .003	+62 55 8.01	+13.013	+ .115	+ .03	4	18.22
8602	BD+31° 4210	K2	8.0	7.93	41 57.070	2.4503	+ ,0027	+ .0001	+31 28 58.07	13.015	.267	− .014	4	17.77
8603	BD+22° 4176	G5	*7.82*	7.68	42 8.372	2.6473	+ .0015	.000	+22 43 31.03	13.028	.288	.00	[illegible]	17.82
8604	BD+66° 1319	G	*9.24*	8.81	42 47.93	0.7659	− .0258	+ .0053	+66 17 22.69	13.071	.079	+ .026	4	17.95
8605	BD+69° 1122	A2	*8.30*	8.39	42 48.61	0.3824	− .0423	+ .0079	+69. 21 54.34	13.072	.037	+ .023	4	18.22
8606	γ^{2} Delphini *f. br.*	G5	4.49	4.90	20 42 56.817	+2.7855	+ .0001	− .0023	+15 50 7.58	+13.081	+ .302	− .204	[illegible]	17.95
8607	ε Cygni	K0	2.64	2.90	42 58.414	2.3982	+ .0030	+ .0288	+33 40 12.27	13.083	.259	+ .323	32	21.73
8608	BD− 9° 5579	F8	9.8		43 11.042	3.2388	− .0082	+ .002	− 9 19 30.28	13.097	.352	+ .06	4	18.47
8609	BD+11° 4378		*9.22*	9.2	43 19.913	2.8658	− .0010	+ .003	+11 34 3.32	13.107	.311	+ .02	4	18.04
8610	ε Aquarii	A0	3.83	3.82	43 20.811	3.2472	− .0084	+ .0019	− 9 47 22.10	13.107	.353	− .034	94 71	18.47 18.57
8611	6 H Cephei	G0	4.63	4.96	20 43 22.004	+1.4985	− .0047	− .0082	+57 17 32.29	+13.109	+ .160	− .232	4	18.67
8612	3 Aquarii	Ma	4.60	4.57	43 31.049	3.1668	− .0065	− .0004	− 5 19 17.10	13.119	.344	− .039	6	18.58
8613	BD+ 1° 4363	K5	7.33	6.91	43 31.140	3.0456	− .0040	− .0038	+ 1 32 15.42	13.119	.331	− .014	[illegible]	17.31
8614	η Cephei	K0	3.59	3.56	43 39.86	1.2107	− .0114	+ .0131	+61 31 37.90	13.129	.128	+ .820	4	17.85
8615	Brad 2688 *br.*	A0	5.64	5.64	43 50.570	2.9717	− .0027	+ .0003	+ 5 42 48.57	13.140	.322	+ .005	4	17.71
8616	BD−18° 5779 *br.*	G5	7.3	6.95	20 43 53.332	+3.4103	− .0127	+ .0009	−18 29 49.36	+13.143	+ .370	− .004	[illegible]	18.43
8617	Grmb 3285	K0	6.43	6.08	44 2.060	1.7488	− .0005	− .0105	+52 42 13.09	13.153	.186	− .111	4 5	18.10 17.42
8618	λ Cygni *m.*	B5	4.47		44 17.458	+2.3355	+ .0032	+ .0003	+36 11 46.37	13.170	+ .251	− .011	4	18.42
8619	BD+84° 470		*9.40*		44 27.93	−7.4032	−1.1891	+ .0097	+84 30 39.62	13.182	− .819	− .013	4	18.53
8620	Wi (2) 20^{h} 1376	A5	6.95	7.23	44 27.966	+2.5531	+ .0024	+ .0016	+27 18 1.25	13.182	+ .275	− .019	[illegible]	18.16
8621	BD+14° 4423	K2	8.09	7.74	20 44 31.166	+2.7997	− .0001	− .001	+15 10 26.72	+13.185	+ .302	+ .01	4	17.44
8622	Pi 20^{h} 305	B8	5.78	5.85	44 32.839	3.5653	− .0175	+ .0001	−26 4 38.50	13.187	.386	− .030	4	18.17
8623	BD+24° 4245	K5	9.0	8.6	44 40.732	2.6176	+ .0019	− .0023	+24 20 38.35	13.196	.281	+ .014	4	18.03
8624	BD+68° 1153	A	*9.12*	9.3	44 41.45	0.5087	− .0370	+ .0036	+68 34 43.93	13.196	.050	+ .003	4	18.12
8625	BD+ 9° 4643		*9.32*		44 51.513	2.9014	− .0016	− .003	+ 9 40 21.22	13.207	.313	.00	4	18.64
8626	BD+48° 3211	K0	*8.4*	8.14	20 44 52.703	+1.9126	+ .0015	.000	+49 5 36.23	+13.209	+ .205	+ .05	[illegible]	18.87
8627	BD+ 3° 4431		*9.64*		44 56.647	3.0083	− .0033	− .0011	+ 3 40 8.72	13.213	.325	− .021	[illegible]	18.09
8628	Wi (1) 20^{h} 1069	Mb	6.53	6.46	45 10.453	3.0878	− .0049	− .0027	− 0 51 35.29	13.228	.333	− .025	4	18.12
8629	BD+28° 3890	G5	8.4	8.35	45 17.013	2.5277	+ .0026	+ .0040	+28 30 21.43	13.235	.271	+ .055	4	18.15
8630	BD+41° 3894		9.1	9.2	45 35.253	2.1939	+ .0032	+ .003	+41 14 28.64	13.255	.234	.00	4	18.69
8631	BD+17° 4425		*8.69*	9.18	20 45 40.196	+2.7434	+ .0006	.000	+18 11 24.91	+13.261	+ .294	− .01	4	17.77
8632	BD+71° 1029	G0	*8.70*	9.1	45 43.48	0.0822	− .0591	+ .0055	+71 28 38.49	13.264	.003	+ .021	4	18.36
8633	BD+55° 2472	G5	*9.52*		45 51.601	1.5778	− .0032	+ .001	+56 10 57.63	13.273	.167	+ .02	4 5	18.00 17.78
8634	BD+38° 4239	A0	*7.55*	7.72	45 58.336	2.2746	+ .0033	.0000	+38 34 4.40	13.280	.243	− .011	5	18.99
8635	BD+35° 4282	K5	6.70	6.57	46 2.586	2.3650	+ .0033	.000	+35 16 0.07	13.285	.252	− .02	4	18.19
8636	Lal 40191	F5	7.07	7.0	20 46 17.000	+3.4687	− .0146	+ .0009	−21 36 34.73	+13.301	+ .372	− .068	4	18.06
8637	Pi 20^{h} 325	K0	5.99	5.82	46 17.277	3.3006	− .0099	+ .0083	−12 50 31.77	13.301	.354	− .072	4	17.94
8638	BD+11° 4397	A0	*8.55*	8.59	46 22.731	2.8642	− .0009	− .001	+11 47 6.77	13.307	.306	+ .02	4	18.53
8639	BD+57° 2248	F5	*8.45*	8.61	46 22.782	1.4759	− .0052	.0000	+57 57 34.88	13.307	.155	+ .010	4	18.49
8640	BD+25° 4390	F0	9.8	9.2	46 34.165	2.5890	+ .0022	− .0001	+25 50 32.24	13.320	.277	− .024	5	18.09

8606. 5^{m}47, 11$''$, 270°. 8615. 9^{m}0, 1$''$7, 188°. 8616. 7^{m}7, 16$''$, 294°. 8618. 4^{m}8–6^{m}1, 0$''$7, 51°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8641	BD−14° 5866	A5	8.1	7.78	20 46 53.164	+3.3255	−0.0106	+0.0008	−14 13 22.04	+13.340	+0.356	−0.061	5	19.64
8642	ω Capricorni	Ma	4.24	4.2	47 3.030	+3.5854	− .0185	− .0006	−27 13 9.55	13.351	+ .383	− .014	4	19.19
8643	BD+85° 354	K0	7.91	7.95	47 3.45	−9.229	−1.720	+ .039	+85 22 4.13	13.351	−1.009	+ .038	4	18.31
8644	BD+16° 4385		*9.54*		47 9.711	+2.7642	+ .0005	+ .002	+17 12 12.74	13.358	+ .295	.00	4	18.28
8645	Brad 2702	A5	5.07	5.47	47 14.294	2.1189	+ .0030	+ .0114	+43 45 26.47	13.363	.224	+ .128	4	18.02
8646	BD− 4° 5281		9.6		20 47 14.742	+3.1410	− .0061	+ .0011	− 3 55 19.47	+13.364	+ .336	+ .019	4	18.44
8647	CD−24° 16321	K2	9.1		47 36.523	3.5251	− .0165	+ .0040	−24 27 31.16	13.387	.377	− .036	4	17.71
8648	Fedor 3606	B0	6.38	6.4	47 53.26	1.0586	− .0163	− .0017	+63 44 36.53	13.406	.109	+ .007	4	17.98
8649	BD+ 1° 4384		*9.52*		48 17.061	3.0371	− .0039	+ .0021	+ 2 3 17.94	13.431	.324	− .025	4	17.78
8650	μ Aquarii	A3	4.80	4.65	48 20.419	3.2348	− .0083	+ .0025	− 9 17 3.55	13.435	.344	− .035	83 66	18.92 19.05
8651	BD+20° 4743	K7	*9.56*		20 48 22.557	+2.7058	+ .0012	.000	+20 18 24.11	+13.437	+ .287	− .01	6	18.57
8652	76 Draconis	A0	5.69		48 27.92	−4.1979	− .5497	+ .0163	+82 14 10.20	13.443	− .460	+ .026	186 157	20.38 20.22
8653	BD−16° 5719	K0	9.2	8.5	48 32.844	+3.3601	− .0116	+ .0035	−16 10 14.40	13.448	+ .357	− .006	5	18.14
8654	BD+32° 3973		*8.87*	8.7	48 41.133	2.4301	+ .0033	+ .002	+32 58 35.89	13.457	.256	.00	4	17.63
8655	CD−26° 15323	F5	7.6	7.46	49 10.772	3.5682	− .0182	+ .0008	−26 37 14.91	13.489	.379	− .094	5	19.10
8656	BD+13° 4559		*9.61*		20 49 15.926	+2.8243	− .0003	+ .002	+14 6 32.33	+13.495	+ .299	+ .01	5 4	17.10 17.96
8657	BD+51° 2967	K5	*9.12*	9.5	49 28.791	1.8272	+ .0007	+ .002	+51 35 51.14	13.509	.191	− .01	5	18.16
8658	BD+45° 3309	A	9.3		49 47.988	2.0462	+ .0028	.000	+46 9 10.24	13.529	.214	.00	4	17.63
8659	BD+59° 2290		*9.80*		50 8.44	1.3619	− .0079	− .001	+60 4 37.31	13.551	.141	− .02	4	18.52
8660	BD+18° 4646	F0	*8.97*	8.88	50 12.338	2.7304	+ .0009	+ .004	+19 10 22.38	13.555	.288	+ .04	4	17.43
8661	BD+ 6° 4688		9.1		20 50 16.786	+2.9501	− .0023	− .001	+ 7 6 0.14	+13.560	+ .311	+ .04	4	17.99
8662	CD−28° 16988	G0	9.1		50 19.725	3.6136	− .0198	.0000	−28 47 45.43	13.563	.382	− .067	4	18.12
8663	BD− 6° 5619	K0	8.2	8.1	50 21.570	3.1721	− .0068	.000	− 5 46 10.21	13.565	.334	− .02	4	17.90
8664	BD+29° 4227	A2	9.1		50 48.541	2.5190	+ .0029	+ .0010	+29 24 56.59	13.594	.264	− .028	4	18.09
8665	BD−11° 5463	K0	8.0	8.37	51 2.737	3.2745	− .0094	.0000	−11 37 13.54	13.609	.344	+ .040	4	18.11
8666	BD+40° 4348		8.8	8.1	20 51 4.040	+2.2377	+ .0036	+ .005	+40 24 6.83	+13.611	+ .234	+ .01	4	17.96
8667	BD− 8° 5519	F8	9.2	9.1	51 4.622	3.2139	− .0079	+ .003	− 8 11 23.19	13.612	.338	− .05	4	19.06
8668	BD−20° 6070	A5	9.0		51 5.102	3.4321	− .0140	+ .0002	−20 7 24.42	13.612	.361	− .010	4	17.70
8669	32 Vulpeculæ	K5	5.24	5.00	51 8.961	+2.5567	+ .0028	− .0007	+27 45 9.72	13.616	+ .268	− .002	5	19.44
8670	Brad 2749	K0	5.58	5.44	51 15.65	−2.6339	− .3229	− .0101	+80 15 10.76	13.623	− .287	− .030	8	18.78
8671	BD+48° 3242	B2	7.13	7.10	20 51 17.441	+1.9360	+ .0022	− .0007	+49 13 44.09	+13.625	+ .201	+ .004	4	17.90
8672	Wi (2) 20^{h} 1574 *br.*	A0	7.30	7.32	51 34.440	2.3411	+ .0037	+ .0006	+36 46 6.74	13.643	.244	− .015	5 4	17.38 17.77
8673	BD+58° 2187 *m.*	*	6.82	6.98	51 45.550	1.4442	− .0059	+ .010	+59 0 12.14	13.655	.148	− .03	4	18.00
8674	Brad 2708	K0	5.39	5.66	51 49.375	2.8394	− .0004	+ .0009	+13 24 56.22	13.659	.297	− .019	5	19.63
8675	BD−18° 5811	K5	9.4	8.4	52 26.060	3.3864	− .0127	.0000	−17 49 29.32	13.684	.355	+ .010	4	18.05
8676	BD− 1° 4079	G5	8.3	7.83	20 52 26.492	+3.0961	− .0052	+ .0010	− 1 22 15.03	+13.699	+ .324	− .018	4	18.51
8677	7 Aquarii *br.*	K2	5.68	5.37	52 34.700	3.2447	− .0087	− .0010	−10 0 18.29	13.708	.339	− .014	5	18.45
8678	BD− 0° 4130	K0	7.83	7.92	52 47.742	3.0694	− .0047	− .0017	+ 0 11 43.92	13.722	.321	− .014	5	17.68
8679	BD−22° 5576	F5	8.4	8.6	53 9.846	3.4630	− .0151	− .0022	−21 51 51.09	13.745	.362	− .030	4	18.02
8680	Pi 20^{h} 386	A3	5.95	5.69	53 12.070	3.3578	− .0119	+ .0040	−16 20 25.07	13.747	.351	+ .003	4	17.56
8681	BD+54° 2442	A7	*8.55*	8.8	20 53 14.868	+1.7033	− .0009	− .001	+54 37 22.44	+13.750	+ .175	+ .03	4	17.50
8682	BD− 3° 5076	Ma	8.6	7.31	53 18.726	3.1329	− .0059	− .0001	− 3 32 42.20	13.754	.326	− .007	4	17.97
8683	BD+ 0° 4621	A5	8.78	9.1	53 23.524	+3.0677	− .0045	+ .0008	+ 0 17 34.78	13.760	+ .319	− .008	4	17.95
8684	BD+76° 820		*9.55*		53 40.88	−1.1681	− .1607	− .0039	+77 6 29.31	13.778	− .129	− .074	5	18.20
8685	Pi 20^{h} 393	K2	6.88	6.57	53 48.383	+3.0068	− .0032	− .0002	+ 3 53 10.57	13.783	+ .312	.000	4	17.74
8686	BD+ 7° 4589	F2	*9.09*	8.8	20 53 58.797	+2.9350	− .0020	− .003	+ 8 5 5.83	+13.797	+ .305	+ .02	4	17.45
8687	BD+34° 4214		*9.55*		54 6.707	2.4035	+ .0037	− .002	+34 37 50.33	13.805	.248	− .01	4	18.11
8688	ν Cygni	A0	4.04	4.03	54 11.370	2.2349	+ .0038	+ .0004	+40 51 30.80	13.810	.230	− .024	11	20.91
8689	CD−25° 15153	G0	8.1	8.13	54 21.718	3.5382	− .0177	+ .0101	−25 41 9.87	13.821	.367	− .264	4	17.88
8690	BD+ 5° 4659	K2	8.66	8.7	54 27.462	+2.9833	− .0028	− .0032	+ 5 16 49.97	13.827	+ .309	− .026	4	17.77
8691	BD+81° 721		*8.80*	8.7	20 54 30.14	−3.4160	− .4474	+ .0018	+81 31 19.19	+13.830	− .366	− .014	4	18.02
8692	BD+47° 3237	A0	8.5	8.12	54 36.458	+1.9994	+ .0028	− .002	+47 59 10.94	13.837	+ .205	− .03	4	17.81
8693	Brad 2719	K5	5.57	5.6	54 41.680	2.6819	+ .0018	.0000	+22 0 57.17	13.842	.279	− .005	4	17.66
8694	BD+16° 4415	G5	9.1	8.5	54 47.046	2.7868	+ .0005	+ .005	+16 29 11.95	13.848	.288	.00	4	18.38
8695	BD− 7° 5460	A3	7.9	8.08	54 51.190	3.1950	− .0075	+ .002	− 7 13 1.83	13.852	.330	+ .01	4	18.38
8696	BD+27° 3934	G5	*8.6*	9.2	20 54 56.389	+2.5603	+ .0029	+ .0064	+27 57 11.36	+13.858	+ .264	+ .028	4	18.31
8697	CD−24° 16399	G0	9.7		54 57.131	3.5027	− .0165	− .0005	−24 0 15.80	13.858	.363	− .114	4 5	18.72 17.87
8698	BD+42° 3923		*9.5*	8.8	55 4.458	2.1744	+ .0037	.000	+42 57 3.66	13.866	.223	.00	4	17.87
8699	BD+60° 2179 *br.*	F5	*8.52*	7.89	55 5.55	1.3138	− .0093	+ .005	+61 15 3.93	13.867	.133	.00	5 4	16.76 17.52
8700	BD+31° 4292	B9	7.17	[illegible]	55 24.570	2.4860	+ .0034	+ .0014	+31 20 11.15	13.887	.255	+ .037	4	17.86

8672. $10^{\mathrm{m}}5$, 1″8, 34°.

8673. F2, A2, $7^{\mathrm{m}}4$-$7^{\mathrm{m}}8$, 0″2, 220°.

8677. $11^{\mathrm{m}}7$, 2″1, 166°.

8699. $10^{\mathrm{m}}0$, 4″3, 330°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8701	BD+50° 3236	G0	*8.62*	8.50	20 55 32.330	+1.9018	+0.0019	+0.001	+50 33 40.28	+13.895	+0.194	+0.01	4	17.93
8702	BD−14° 5906	K0	9.4		55 50.921	3.3169	− .0108	+ .0036	−14 14 32.59	13.915	.341	+ .016	4	18.59
8703	BD− 6° 5646	A5	9.0	8.9	55 54.769	3.1712	− .0070	+ .002	− 5 51 2.51	13.919	.327	+ .02	4	17.97
8704	BD+12° 4517		*9.41*		56 18.729	2.8619	− .0006	+ .003	+12 23 16.47	13.944	.294	+ .02	4	18.14
8705	11 Aquarii	G0	6.26	6.42	56 21.153	3.1574	− .0066	+ .0029	− 5 2 24.18	13.946	.324	− .136	5	18.28
8706	γ Microscopii	G5	4.71		20 56 23.288	+3.6858	− .0235	+ .0006	−32 34 16.96	+13.949	+ .380	+ .004	4	17.12
8707	CD−28° 17054	K2	8.7		56 34.820	3.5830	− .0195	+ .0011	−28 1 15.20	13.961	.369	− .002	4	17.69
8708	BD+18° 4673	F5	8.7	8.91	56 40.945	2.7558	+ .0010	.000	+18 17 51.53	13.967	.282	− .02	5	18.13
8709	f^1 Cygni	B0	4.86	5.10	57 6.207	2.0392	+ .0032	+ .0007	+47 12 29.33	13.994	.206	+ .003	4	18.70
8710	BD+44° 3662		*9.34*	9.3	57 8.246	2.1189	+ .0036	+ .022	+44 55 21.14	13.996	.215	+ .02	5	17.74
8711	BD+37° 4138		*8.87*		20 57 20.708	+2.3308	+ .0041	+ .002	+37 49 7.07	+14.009	+ .237	− .01	4	17.69
8712	BD+77° 796		*9.05*		57 27.77	−1.5195	− .2023	− .0088	+78 14 53.10	14.016	− .164	.000	4	17.91
8713	BD+ 0° 4642	A0	8.24	8.33	57 29.057	+3.0529	− .0042	− .0007	+ 1 11 24.63	14.018	+ .313	− .011	4	17.52
8714	BD+20° 4803	A2	9.00		57 29.985	2.7195	+ .0016	.000	+20 17 41.89	14.019	.276	− .01	4	17.96
8715	BD+65° 1528		*9.60*		57 44.25	0.9600	− .0211	− .0016	+65 41 38.04	14.033	.094	+ .009	5	19.32
8716	BD+ 9° 4700		9.3		20 57 51.992	+2.9075	+ .0014	− .001	+ 9 49 48.66	+14.041	+ .297	.00	4	18.05
8717	BD−17° 6158	A3	8.2	7.84	57 52.608	3.3757	− .0127	− .0020	−17 37 32.02	14.042	.345	− .008	4	18.09
8718	BD+10° 4443		*9.32*		57 55.037	2.8832	− .0009	+ .001	+11 14 35.30	14.045	.295	+ .01	4	17.55
8719	BD+39° 4408 *m.*	A0	8.0	7.95	57 55.180	2.2820	+ .0042	+ .001	+39 40 13.88	14.045	.232	− .01	4	17.92
8720	Brad 2735 *br.*	B3	5.24	5.9	58 23.288	2.0928	+ .0036	+ .0002	+45 50 27.74	14.074	.211	+ .003	4	17.74
8721	BD+50° 3245	A7	*9.75*		20 58 30.448	+1.8953	+ .0020	+ .008	+51 4 13.49	+14.081	+ .191	− .02	4	17.53
8722	BD−19° 5999	G0	8.33	8.38	58 33.830	3.4119	− .0139	− .0109	−19 38 3.84	14.085	.348	− .117	4	17.72
8723	BD+33° 4125	F5	7.72	7.83	59 0.935	2.4465	+ .0038	+ .003	+33 25 17.12	14.113	.247	+ .08	4	17.47
8724	BD+ 3° 4490	A2	8.1	8.07	59 21.436	3.0188	− .0033	− .0008	+ 3 15 12.25	14.134	.306	− .016	4	17.64
8725	Grmb 3375 *br.*	B8	6.70	6.96	59 44.655	1.6295	− .0021	− .0005	+56 45 20.20	14.158	.162	+ .003	4	17.84
8726	η Capricorni	A3	4.93	4.6	20 59 51.266	+3.4201	− .0143	− .0030	−20 10 19.66	+14.165	+ .346	− .043	4	17.45
8727	BD+23° 4224	Mb	7.45	7.10	20 59 57.016	2.6582	+ .0023	− .001	+23 40 45.27	14.171	.268	.00	4	17.76
8728	BD+26° 4064	F5	*8.82*	8.6	21 0 12.878	2.6019	+ .0029	− .0003	+26 30 23.34	14.187	.262	+ .032	4	17.66
8729	BD− 9° 5650	G5	8.4	7.91	0 27.268	3.2237	− .0084	+ .001	− 9 5 51.29	14.202	.325	− .03	4	17.82
8730	Fedor 3684	B5	7.20	7.4	0 37.13	0.7581	− .0300	− .0024	+67 50 48.70	14.212	.072	+ .006	12	18.97
8731	BD+62° 1885		*9.20*	9.1	21 0 50.32	+1.2367	− .0119	− .003	+62 51 7.99	+14.226	+ .121	+ .03	4	17.50
8732	BD+31° 4324	K0	*8.46*	8.28	1 0.398	2.4916	+ .0038	− .0034	+31 42 18.68	14.236	.250	− .055	5 4	17.13 17.99
8733	BD+ 6° 4741	K5	*8.34*	8.42	1 22.426	2.9613	− .0023	+ .0040	+ 6 45 45.58	14.259	.297	− .550	4	17.50
8734	θ Capricorni	A0	4.19	4.54	1 27.132	3.3697	− .0128	+ .0057	−17 33 5.54	14.263	.339	+ .066	5	17.26
8735	Brad 2731	K0	5.26		1 31.474	3.6744	− .0239	− .0012	−32 39 43.34	14.268	.370	− .011	4	18.70
8736	BD+13° 4612		*9.79*		21 1 35.187	+2.8492	− .0003	+ .003	+13 23 58.10	+14.272	+ .285	+ .01	4	17.71
8737	BD+16° 4454	K5	*8.55*	8.34	1 54.516	2.7940	+ .0006	+ .001	+16 33 54.30	14.291	.280	− .03	4	18.04
8738	ξ Cygni	K5	3.92	3.7	2 1.168	2.1806	+ .0042	+ .0006	+43 36 29.27	14.298	.216	− .003	4	17.80
8739	CD−23° 16700	F5	6.96	6.9	2 25.172	3.4787	− .0165	+ .0077	−23 28 15.25	14.323	.349	+ .028	4	17.70
8740	BD+19° 4618		*8.75*	8.58	2 26.937	2.7307	+ .0016	− .002	+20 5 47.46	14.325	.273	− .04	4	18.04
8741	Wi (1) 20h 1503	K2	7.10	6.93	21 2 27.084	+3.0797	− .0048	+ .0004	− 0 25 34.16	+14.325	+ .308	+ .001	4	18.13
8742	A Capricorni	Ma	4.60	4.72	2 27.105	3.5151	− .0178	− .0022	−25 19 35.71	14.324	.353	− .051	4	18.92
8743	BD+70° 1158	K0	*7.87*	8.04	2 29.27	0.3280	− .0526	+ .0060	+71 11 43.42	14.327	.027	+ .009	4	17.49
8744	BD−13° 5850	A0	8.6	8.30	2 34.916	3.2885	− .0104	− .0018	−13 0 26.02	14.333	.329	+ .016	4	18.14
8745	BD− 3° 5121	K2	9.2	9.3	2 42.639	3.1230	− .0058	+ .0014	− 3 5 3.15	14.341	.312	− .019	4	18.19
8746	Wi (2) 20h 1856	K2	6.23	5.95	21 2 54.581	+2.6055	+ .0030	+ .0027	+26 36 12.53	+14.353	+ .259	− .017	5 6	18.57 17.89
8747	Pulk (55) 3078	F5	5.86	6.12	3 8.767	2.5158	+ .0038	− .0008	+30 51 47.94	14.367	.250	+ .003	4	18.28
8748	BD+47° 3286	A0	7.50	7.27	3 12.256	2.0480	+ .0037	− .001	+47 43 24.24	14.371	.202	+ .01	4	17.93
8749	61^1 Cygni *n. pr.*	K5	5.57	4.97	3 17.769	2.3358	+ .0045	+ .3538	+38 21 11.22	14.376	.232	+3.250	4	17.74
8750	Wi (1) 20h 1553	K0	6.52	6.0	3 47.892	2.8179	+ .0004	+ .0026	+15 20 14.09	14.407	.280	− .067	4	17.93
8751	f^2 Cygni	K5	4.88	4.92	21 3 50.669	+2.0651	+ .0038	+ .0011	+47 19 34.83	+14.410	+ .203	− .008	4	19.38
8752	χ Capricorni	A0	5.27	5.51	3 58.836	3.4387	− .0153	+ .0014	−21 30 56.72	14.418	.342	− .057	4	18.31
8753	BD−15° 5897	A2	8.2	8.5	4 0.354	+3.3254	− .0115	+ .0022	−15 13 39.39	14.420	+ .330	− .021	4	17.91
8754	BD+82° 636	A5	*8.10*	7.82	4 6.52	−4.1409	− .6189	+ .0089	+82 40 14.00	14.426	− .427	+ .004	6 5	18.21 19.13
8755	Lac 8701 *br.*	G5	6.95	6.7	4 12.216	+3.5825	− .0206	+ .0034	−28 47 55.43	14.432	+ .356	− .136	4	18.32
8756	BD+51° 2995	B5	*8.92*	9.2	21 4 17.498	+1.8996	+ .0023	+ .004	+51 40 55.99	+14.437	+ .186	− .01	4	18.05
8757	Wi (1) 20h 1565	K5	6.38	6.3	4 31.053	2.9645	+ .0022	− .0013	+ 6 39 56.08	14.451	.293	+ .001	4	18.25
8758	BD− 6° 5689	A3	7.8	8.10	4 41.864	3.1807	− .0074	− .001	− 6 39 11.98	14.462	.316	+ .01	4	18.08
8759	BD+28° 3996	K0	*8.59*	8.13	4 45.597	2.5746	+ .0034	+ .0041	+28 17 54.44	14.465	.253	+ .025	4	17.91
8760	BD+60° 2201		*9.20*		4 46.17	1.4328	− .0065	− .009	+60 34 21.38	14.466	.138	− .05	4	18.24

8719. 8$^{\rm m}$7-8$^{\rm m}$7, 0$''$3, 230°.
8720. 9$^{\rm m}$4, 2$''$8, 162°.

8725. 12$^{\rm m}$5, 1$''$8, 139°.
8749. 6$^{\rm m}$28, 24″, 132°.

8755. 14$^{\rm m}$, 3$''$7, 280°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	′	″	″		
8761	BD−34° 4294	A0	*8.64*	8.47	21 5 0.178	+2.4254	+0.0044	0.000	+35 0 32.47	+14.480	+0.238	−0.01	4	18.47
8762	BD+68° 1180	A2	*8.87*	8.6	5 6.29	0.6737	− .0351	+ .0063	+68 56 33.86	14.486	.061	+ .023	4	17.79
8763	ν Aquarii	K0	4.52	4.38	5 14.274	3.2638	− .0097	+ .0063	−11 41 47.13	14.494	.322	− .013	124 108	19.30 19.49
8764	BD+39° 4447	F8	*8.48*	8.00	5 16.212	2.3160	+ .0047	+ .005	+39 20 44.88	14.496	.227	+ .05	4	17.73
8765	BD− 5° 5485	K0	9.8		5 25.002	3.1602	− .0068	− .003	− 5 25 3.75	14.505	.312	.00	4	18.46
8766	BD+ 0° 4672	G0	8.31	8.45	21 5 26.461	+3.0527	− .0042	− .0008	+ 1 14 33.98	+14.507	+ .301	+ .029	5	17.94
8767	CD−25° 15271	G0	8.7	8.09	5 26.965	3.5056	− .0178	+ .0109	−25 8 52.27	14.507	.346	− .032	4	18.20
8768	BD+ 4° 4621		9.1	8.82	5 30.451	2.9918	− .0028	− .0008	+ 5 1 4.83	14.510	.295	− .001	5 4	17.19 18.07
8769	BD−17° 6196	F2	8.4	8.44	5 54.156	3.3591	− .0127	+ .0010	−17 17 1.62	14.534	.332	− .032	4	18.57
8770	BD+10° 4476	A2	8.0	8.64	6 5.582	2.8976	− .0009	− .001	+10 46 53.61	14.546	.284	+ .02	4	18.19
8771	BD+48° 3295	A0	*8.60*	8.37	21 6 19.253	+2.0374	+ .0038	+ .001	+48 25 13.68	+14.559	+ .198	.00	4	18.20
8772	BD+44° 3715		9.0		6 23.225	2.1685	+ .0045	− .002	+44 33 37.74	14.563	.211	− .01	4	18.30
8773	γ Equulei *br.*	F0	4.76	4.96	6 27.094	2.9140	− .0013	+ .0036	+ 9 48 31.10	14.567	.285	− .161	4	18.67
8774	BD−19° 6041	G0	9.0		6 29.288	3.3946	− .0140	+ .0030	−19 19 43.01	14.569	.334	− .046	4	19.07
8775	CD−27° 15293	A5	9.2		6 31.136	3.5494	− .0196	+ .0010	−27 27 0.54	14.571	.350	+ .013	4	18.23
8776	BD− 9° 5677	K0	10.0		21 6 54.247	+3.2265	− .0087	− .001	− 9 31 54.97	+14.594	+ .317	.00	4	18.36
8777	BD+21° 4486	A0	6.94	6.88	6 55.755	+2.7003	+ .0022	.000	+22 7 41.46	14.596	+ .264	.00	4	17.33
8778	98 B Cephei	B9	5.90	6.37	7 7.46	−1.1606	− .1795	+ .0083	+77 48 7.94	14.608	− .122	+ .033	8	18.66
8779	BD+32° 4078		*9.14*	8.7	7 29.533	+2.4750	+ .0044	+ .001	+33 11 41.53	14.630	+ .242	− .01	4	18.10
8780	BD+56° 2536	B9	*9.50*		7 30.533	1.6752	− .0010	− .004	+56 49 44.18	14.631	.161	+ .03	4	18.13
8781	BD+57° 2291		*8.97*	8.85	21 7 56.799	+1.6016	− .0025	+ .002	+58 12 53.36	+14.657	+ .153	+ .04	5	18.24
8782	BD+12° 4569	K5	7.5	7.49	7 57.489	2.8686	− .0003	− .001	+12 37 24.83	14.658	.279	+ .01	4	17.79
8783	BD− 1° 4120	G5	8.9	8.7	8 0.721	3.0841	− .0051	+ .0002	− 1 20 49.76	14.661	.302	− .043	4	17.99
8784	BD+18° 4729	A0	8.18	7.8	8 3.746	2.7582	+ .0015	.000	+19 2 41.80	14.664	.268	.00	4	18.07
8785	BD+ 8° 4627	A0	*8.92*	8.62	8 6.197	2.9374	− .0016	−. 002	+ 8 26 56.52	14.666	.286	+ .03	4	18.06
8786	BD+24° 4347	A2	8.8		21 8 23.778	+2.6472	+ .0029	+ .0011	+25 4 4.29	+14.684	+ .257	− .041	4	17.88
8787	BD−21° 5963	K0	9.4		8 29.712	3.4330	− .0155	+ .0010	−21 36 53.67	14.690	.334	− .003	4	18.86
8788	3 Pis Aus	K5	5.55	5.80	8 32.922	3.5550	− .0201	+ .0071	−27 56 47.15	14.693	.347	− .138	4	18.41
8789	BD+38° 4386		*8.91*	8.9	8 54.813	2.3564	+ .0049	+ .003	+38 17 1.20	14.715	.227	+ .03	4	17.53
8790	BD+14° 4556	F8	8.09	7.76	9 7.529	2.8254	+ .0005	+ .003	+15 15 32.43	14.727	.273	+ .06	4	18.13
8791	BD−13° 5878	A3	9.0		21 9 16.513	+3.2844	− .0105	+ .0026	−13 9 15.18	+14.736	+ .318	+ .026	4	18.05
8792	BD+41° 4037		*8.42*	9.13	9 22.665	2.2566	+ .0050	− .002	+42 1 36.08	14.742	.217	− .01	4	18.63
8793	BD+ 2° 4323		*9.54*		9 28.838	3.0347	− .0037	− .0002	+ 2 24 23.53	14.748	.294	− .014	4	18.09
8794	ζ Cygni	K0	3.40	3.54	9 31.791	2.5524	+ .0040	− .0002	+29 53 53.17	14.751	.245	− .059	32 29	22.04 22.45
8795	CD−25° 15312	K2	9.2		9 38.458	3.5065	− .0183	− .0022	−25 37 27.96	14.758	.340	− .015	4 5	18.59 17.77
8796	96 B Cephei *m.*	B2	5.65	5.86	21 9 46.093	+1.5287	− .0042	− .0005	+59 39 25.79	+14.765	+ .144	+ .003	4	18.16
8797	CD−23° 16789	G0	8.3	8.1	9 55.935	3.4600	− .0165	+ .0085	−23 12 33.56	14.775	.335	− .021	3	18.32
8798	BD−11° 5553	B9	6.49	6.76	9 57.102	+3.2472	− .0094	+ .0009	−10 56 11.87	14.776	+ .314	.000	4	17.80
8799	BD+74° 907	F5	6.96	7.13	10 0.60	−0.2731	− .0993	+ .0044	+74 54 0.06	14.779	− .033	+ .007	4	17.99
8800	BD+53° 2571	A0	*8.25*	8.26	10 1.084	+1.8497	+ .0020	+ .006	+53 34 7.44	14.780	+ .176	+ .01	3	17.53
8801	BD+39° 4483	B8	8.92	8.90	21 10 14.809	+2.3126	+ .0051	− .004	+40 7 37.28	+14.793	+ .221	− .01	5 4	17.52 18.48
8802	BD− 3° 5156		9.4		10 17.602	3.1257	− .0060	− .0024	− 3 21 43.95	14.796	.301	− .033	4	18.45
8803	BD+71° 1052		*9.80*		10 21.48	0.3322	− .0560	+ .0032	+71 47 42.77	14.800	.026	+ .029	5	18.69
8804	BD+46° 3233	K0	*8.50*	8.06	10 45.166	2.1202	+ .0047	.000	+46 38 8.81	14.823	.202	+ .02	5 4	17.92 18.75
8805	BD+31° 4384		8.4	7.90	10 45.334	2.5182	+ .0043	− .0008	+31 39 5.37	14.823	.241	− .007	4	17.66
8806	BD+13° 4647	K0	7.9	7.66	21 10 49.940	+2.8517	+ .0001	− .001	+13 48 37.47	+14.828	+ .273	+ .01	4	18.16
8807	W1 (1) 21^{h} 140	K2	7.18	7.02	10 50.899	3.1654	− .0071	− .0009	− 5 52 59.96	14.829	.305	− .031	4	17.49
8808	BD+17° 4530	A3	*8.79*	8.4	11 1.525	2.7867	+ .0012	.000	+17 29 14.04	14.839	.267	− .02	4	18.20
8809	τ Cygni *m.*	F0	3.82	4.00	11 35.727	2.3802	+ .0052	+ .0133	+37 42 10.95	14.873	.226	+ .427	4	17.85
8810	BD+21° 4504	K2	*8.[illegible]*	8.00	11 46.144	2.7210	+ .0023	+ .0008	+21 26 45.74	14.883	.259	+ .006	4	17.65
8811	α Equulei	•	4.14	3.98	21 11 49.498	+2.9957	− .0027	+ .0048	+ 4 54 59.03	+14.886	+ .286	− .087	98 82	19.13 19.10
8812	BD−15° 5938	A0	8.0	7.78	12 11.010	3.3147	− .0117	+ .0001	−15 9 26.08	14.907	.317	+ .016	4	17.48
8813	CD−27° 15351	G5	9.7		12 16.150	3.5323	− .0196	− .0042	−27 14 4.35	14.912	.337	− .020	6 7	17.66 17.63
8814	W1 (2) 21^{h} 212	G5	7.06	7.18	12 25.027	2.6547	+ .0031	− .0046	+25 6 3.00	14.921	.252	− .033	4	18.19
8815	BD−17° 6224	G5	9.8		12 29.481	3.3554	− .0131	+ .0002	−17 34 59.08	14.925	.320	+ .032	4	17.94
8816	BD+59° 2344	B0	*8.57*	8.7	21 12 40.486	+1.5640	− .0033	− .002	+59 25 39.93	+14.946	+ .145	.00	4	18.17
8817	BD+65° 1564		*9.[illegible]*		13 1.25	1.0750	− .0188	+ .0013	+65 59 31.47	14.956	.008	+ .029	4	17.50
8818	BD+18° 4748		*9.2*		13 4.057	2.7650	+ .0017	− .002	+19 1 36.87	14.959	.262	− .06	4	17.98
8819	ε Microscopii	A0	4.70		13 5.489	3.6395	− .0243	+ .0045	−32 30 26.91	14.960	.347	− .034	3	18.20
8820	BD+52° 2997	F8	*9.45*	9.1	13 7.736	1.8040	+ .0029	+ .002	+52 43 51.86	14.962	.178	+ .03	3	18.04

8773. 1140, 272, 274°. 8796. 680-750, 172, 225°. 8809. 3″.85 880, 079, 186°, 47 yrs. 8811. F8, A3.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8821	BD− 7° 5529	K2	9.2		21 13 23.266	+ 3.1818	−0.0076	+0.001	− 7 0 7.14	+14.977	+0.302	+0.02	4	18.22
8822	Brad 2765	B8	5.39	5.57	13 28.229	3.3666	− .0135	+ .0010	−18 19 15.21	14.982	.319	− .004	4 5	18.76 17.90
8823	BD+ 7° 4658	K2	7.25	7.64	13 29.076	2.9495	− .0017	+ .005	+ 7 53 55.66	14.983	.279	+ .03	4	17.72
8824	BD+ 2° 4332	F2	*8.76*	8.88	13 47.540	3.0224	− .0034	+ .0036	+ 3 14 54.16	15.001	.287	+ .045	4	17.72
8825	CD−29° 17687	F0	9.1	8.1	13 52.172	3.5759	− .0217	+ .0040	−29 35 33.49	15.005	.339	− .012	4	17.74
8826	BD+32° 4111	A0	*9.31*		21 14 6.518	+ 2.4992	+ .0048	+ .002	+32 56 37.97	+15.019	+ .235	+ .01	4	18.00
8827	BD+28° 4044	A0	9.0		14 9.400	2.5840	+ .0041	+ .0006	+28 54 45.46	15.022	.243	+ .010	4	17.91
8828	BD+43° 3870		*9.02*	8.9	14 9.509	2.2379	+ .0054	+ .003	+43 20 11.56	15.022	.209	+ .01	4	18.32
8829	σ Cygni	A0	4.28	4.33	14 16.296	2.3551	+ .0054	− .0001	+39 3 31.82	15.029	.221	− .002	14	21.51
8830	υ Cygni	B3	4.42	4.53	14 37.591	2.4646	+ .0050	+ .0016	+34 33 37.19	15.049	.231	− .021	4	18.94
8831	BD+55° 2549	K2	6.18	5.65	21 14 50.699	+ 1.7915	+ .0013	+ .0025	+55 27 41.43	+15.062	+ .166	+ .011	4	18.34
8832	Wi (1) 21ʰ 256	K5	6.32	6.42	14 59.587	2.9036	− .0006	+ .0018	+10 51 56.17	15.070	.273	+ .010	4	17.69
8833	BD+20° 4883	F2	*8.97*	8.9	15 1.657	+ 2.7352	+ .0023	− .001	+20 57 34.32	15.072	+ .256	.00	4	17.89
8834	BD+76° 831	F5	8.92	9.45	15 12.72	− 0.5297	− .1267	+ .0017	+76 16 11.22	15.083	− .057	− .003	5	18.64
8835	BD+67° 1302		*9.12*	9.1	15 26.45	+ 0.9102	− .0262	+ .0032	+67 52 31.33	15.096	+ .081	+ .014	4	18.19
8836	Brad 2775	O5	5.06	5.42	21 15 28.082	+ 2.2353	+ .0055	− .0014	+43 36 31.26	+15.098	+ .207	− .023	4	17.50
8837	Grmb 3548	A3	7.36	7.65	15 38.15	−12.198	−3.496	+ .022	+86 42 29.34	15.107	−1.174	+ .014	8	18.40
8838	BD+13° 4674 *m.*	K0	8.4	7.69	15 46.620	+ 2.8536	+ .0003	− .001	+14 0 54.49	15.115	+ .268	+ .02	4	17.98
8839	BD−11° 5572	K0	9.0	8.7	15 46.869	3.2403	− .0094	+ .0016	−10 48 41.75	15.116	.305	+ .005	4	18.09
8840	BD+ 0° 4705	K2	*8.89*	8.3	15 58.687	3.0650	− .0044	− .0018	+ 0 30 10.15	15.127	.286	− .072	5	17.78
8841	BD− 0° 4199		9.6		21 15 59.109	+ 3.0786	− .0048	− .0014	− 0 23 15.05	+15.127	+ .288	− .021	4	18.13
8842	BD+17° 4552		*8.83*	8.5	15 59.593	2.7983	+ .0013	+ .001	+17 22 56.61	15.128	.261	+ .01	4	18.15
8843	BD+53° 2594	A0	*9.32*	9.3	16 5.271	1.8550	+ .0024	+ .003	+54 15 34.90	15.133	.171	− .02	5 4	17.16 18.03
8844	D'Agel 5760 *m.*	F2	5.83	5.63	16 10.666	2.3908	+ .0055	+ .0005	+37 53 57.07	15.138	.222	− .002	4	17.98
8845	BD− 2° 5508	G5	8.7	8.44	16 17.758	3.1093	− .0056	− .0072	− 2 23 42.86	15.145	.290	− .233	4	17.92
8846	BD+30° 4398		9.0	9.2	21 16 21.427	+ 2.5504	+ .0046	− .0017	+30 49 50.34	+15.149	+ .237	− .004	4	18.06
8847	α Cephei	A5	2.60	2.9	16 40.26	1.4123	− .0073	+ .0217	+62 14 46.27	15.166	.128	+ .049	4	18.01
8848	BD+49° 3501		8.8	8.43	16 40.994	2.0578	+ .0048	+ .0042	+49 16 32.23	15.167	.190	− .002	4	17.54
8849	BD−21° 5993	K0	8.6		16 44.558	3.4069	− .0152	+ .0030	−20 56 18.15	15.171	.318	− .068	4	18.28
8850	BD+36° 4520		*8.36*	8.37	17 0.172	2.4280	+ .0054	+ .001	+36 28 2.56	15.186	.225	+ .02	4	17.29
8851	BD− 8° 5631	G0	8.2	7.83	21 17 0.367	+ 3.2047	− .0083	− .003	− 8 36 20.42	+15.186	+ .298	− .04	4	18.32
8852	Grmb 3434	K2	6.81	6.81	17 6.388	1.9275	+ .0035	+ .0011	+52 43 8.20	15.192	.177	− .006	4	18.34
8853	BD+ 8° 4655	G5	8.7	8.75	17 14.568	2.9353	− .0013	+ .008	+ 8 57 23.55	15.199	.272	− .14	4	18.04
8854	BD+ 2° 4345	K0	7.12	7.27	17 19.501	3.0326	− .0036	+ .0003	+ 2 38 2.97	15.204	.282	− .008	4	18.03
8855	CD−23° 16872	A0	9.4		17 41.741	3.4424	− .0166	+ .0014	−23 2 31.93	15.225	.320	− .004	4	18.48
8856	ι Capricorni	K0	4.30	4.1	21 17 47.679	+ 3.3412	− .0129	+ .0022	−17 10 33.22	+15.231	+ .310	+ .[illegible]	4	17.69
8857	Lal 41508	K0	6.92	6.60	18 0.677	3.0120	− .0030	+ .0014	+ 4 0 16.02	15.243	.279	− .012	4	17.92
8858	BD+23° 4296	A3	8.4	8.35	18 22.006	2.6963	+ .0031	− .001	+23 29 1.94	15.263	.248	− .01	4	17.89
8859	1 Pegasi	K0	4.27	4.09	18 23.143	2.7666	+ .0020	+ .0072	+19 27 41.79	15.264	.255	+ .058	131 119	19.52 19.58
8860	BD+40° 4498	A0	8.6	8.5	18 25.783	2.3296	+ .0058	+ .002	+40 38 2.27	15.267	.214	+ .01	4	17.64
8861	BD− 6° 5745	Ma	8.4	7.98	21 18 45.542	+ 3.1724	− .0074	.000	− 6 34 30.15	+15.285	+ .293	+ .02	4	17.98
8862	BD+63° 1719		*9.40*		19 7.52	1.3205	− .0103	− .004	+63 46 53.49	15.306	.118	− .03	4	17.89
8863	BD+50° 3321	A0	*8.75*		19 22.884	2.0285	+ .0048	− .002	+50 28 5.74	15.321	.184	− .03	4	18.47
8864	CD−24° 16624	F0	6.69	6.4	19 43.479	3.4696	− .0180	+ .0040	−24 45 56.88	15.340	.320	− .030	5	19.42
8865	BD+45° 3513		*9.55*		19 49.177	2.1807	+ .0058	− .002	+46 3 9.09	15.345	.198	− .05	5 4	18.06 19.14
8866	Brad 2781	A5	5.54	5.62	21 19 49.309	+ 3.2747	− .0107	+ .0059	−13 13 19.44	+15.345	+ .300	+ .003	4	17.18
8867	BD+11° 4554		*9.32*		19 52.482	2.8922	− .0002	− .001	+11 51 47.07	15.348	.264	+ .01	4	17.91
8868	BD−14° 6015	A5	9.4		19 59.002	3.2895	− .0112	.0000	−14 9 44.85	15.355	.301	+ .032	4	18.04
8869	BD+27° 4054	A3	*9.35*		20 9.234	2.6228	+ .0041	− .0025	+27 39 54.06	15.364	.239	− .009	4	17.72
8870	BD+ 6° 4816		*9.50*		20 13.024	2.9670	− .0019	− .001	+ 7 1 27.46	15.368	.271	+ .03	4	17.88
8871	CD−26° 15593	K0	9.2		21 20 31.992	+ 3.4989	− .0192	− .0024	−26 26 58.64	+15.385	+ .320	− .010	4	18.04
8872	BD+37° 4293		*9.05*	9.1	20 38.213	2.3976	+ .0059	+ .003	+38 15 32.16	15.391	.217	+ .01	5 4	18.19 17.77
8873	BD−17° 6262	A2	9.0	9.4	20 44.568	3.3302	− .0126	+ .0022	−16 44 49.44	15.397	.304	+ .004	4	18.02
8874	Brad 2784	K0	5.69	5.5	21 6.700	3.1309	− .0062	− .0017	− 3 54 1.58	15.418	.285	− .070	4	18.49
8875	BD+33° 4247	A2	*8.48*	8.47	21 13.811	2.4988	+ .0054	+ .002	+33 55 5.99	15.424	.226	.00	4	18.16
8876	BD+26° 4149	K2	*8.41*	8.71	21 21 16.913	+ 2.6513	+ .0040	− .0006	+26 17 10.45	+15.427	+ .240	− .029	4	18.47
8877	BD+48° 3372	A2	7.31	7.34	21 20.751	2.1095	+ .0056	+ .004	+48 28 26.28	15.431	.190	+ .05	5	18.34
8878	BD+51° 3057	A0	*7.95*	7.83	21 24.512	1.9772	+ .0044	+ .001	+52 6 16.67	15.434	.178	.00	4	17.88
8879	BD+57° 2318	K0	7.78	7.28	21 32.698	1.7303	+ .0006	− .005	+57 35 47.02	15.442	.155	− .02	4	17.80
8880	BD+68° 1212		*9.12*	9.3	21 33.69	0.8344	− .0311	+ .0006	+69 9 38.80	15.443	.071	+ .006	4	17.94

8838. 8^m5–11^m0, 0″4, 55°.

8844. 6^m6–6^m6, <0″3, 258°.

No.	Name	Sp.	Mag.	Obs Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8881	BD+14° 4607	K2	8.54	8.06	21 21 38.593	+2.8416	+0.0009	−0.001	+15 11 4.38	+15.447	+0.258	−0.05	4	18.23
8882	BD+28° 4085	A0	7.16	7.25	21 51.810	2.5969	+ .0045	+ .0004	+29 6 57.93	15.460	.235	+ .013	4	17.91
8883	BD+31° 4443		8.79	8.6	21 58.916	2.5450	+ .0051	− .0002	+31 49 49.15	15.466	.229	− .052	4	17.89
8884	ζ Capricorni	G5	3.86	4.3	22 6.177	3.4291	− .0166	.0000	−22 45 31.06	15.473	.312	+ .023	4	17.78
8885	69 Cygni	B0	5.84	5.94	22 30.748	2.4495	+ .0058	+ .0002	+36 19 16.63	15.496	.220	− .011	8	18.52
8886	CD−29° 17785		10.6	ft.	21 22 34.053	+3.5521	− .0219	+ .0002	−29 29 39.83	+15.499	+ .322	− .007	4	18.78
8887	Wi (2) 21ʰ 466	A3	6.06	6.20	22 43.652	2.7807	+ .0021	+ .0053	+19 1 42.19	15.507	.251	+ .017	4 5	18.43 17.64
8888	BD+20° 4919	A2	7.70	7.65	22 56.946	2.7588	+ .0025	− .001	+20 21 58.66	15.520	.248	− .02	4	17.78
8889	BD+22° 4394	K2	8.21	8.8	22 56.954	2.7206	+ .0030	− .002	+22 36 10.44	15.520	.244	+ .01	4	18.17
8890	BD−20° 6212	G0	8.5	8.49	22 59.622	3.3907	− .0152	+ .0018	−20 36 53.68	15.522	.306	− .016	4	17.97
8891	BD− 0° 4219		9.2		21 23 8.418	+3.0726	− .0045	− .0011	+ 0 1 20.61	+15.531	+ .276	− .035	4	18.20
8892	BD+47° 3404	A0	8.2	8.03	23 11.792	2.1572	+ .0060	+ .002	+47 18 24.91	15.534	.192	+ .02	6	17.72
8893	BD+ 4° 4675	F0	6.74	6.82	23 17.327	2.9982	− .0025	− .0037	+ 5 2 40.95	15.539	.270	− .037	4	17.73
8894	BD+42° 4098	F5	8.0	8.00	23 21.988	2.2920	+ .0063	.0000	+42 46 22.95	15.543	.204	− .032	4	18.50
8895	BD− 8° 5657	Ma	7.8	8.33	23 29.090	3.2019	− .0085	.000	− 8 42 28.81	15.550	.288	− .02	4	17.49
8896	BD+59° 2376	A3	9.67		21 23 39.433	+1.6283	− .0016	− .004	+59 44 39.14	+15.559	+ .143	− .02	4	18.49
8897	BD+62° 1940		9.30		23 44.87	1.4173	− .0073	− .003	+63 2 14.28	15.564	.124	+ .01	4	17.97
8898	BD+64° 1545		9.07	8.6	24 0.11	1.2724	− .0123	+ .0020	+64 57 39.92	15.578	.110	+ .001	4	18.50
8899	BD+66° 1401		8.80	8.61	24 6.58	1.1519	− .0169	+ .0022	+66 22 1.78	15.584	.099	+ .015	4	18.62
8900	Brad 2793	A0	5.38	5.66	24 8.430	2.6397	+ .0043	+ .0026	+27 15 34.78	15.585	.235	+ .022	5	17.72
8901	b Capricorni	G5	4.59	4.74	21 24 9.922	+3.4149	− .0162	+ .0095	−22 9 22.62	+15.587	+ .306	− .008	5	19.41
8902	Lac 8825	A0	6.60		24 17.203	3.5890	− .0238	+ .0016	−31 35 16.06	15.594	.323	− .020	4	19.22
8903	Lal 41756	Ma	6.66	6.37	24 28.200	2.9571	− .0015	− .0005	+ 7 50 49.22	15.604	.265	− .031	4	18.24
8904	BD+32° 4165		8.89	8.80	24 40.728	2.5370	+ .0055	+ .006	+32 35 27.04	15.615	.225	+ .02	5	17.78
8905	BD+10° 4554 m.	F2	6.70	7.3	24 59.191	2.9141	− .0005	+ .003	+10 44 4.65	15.632	.260	+ .02	4	18.64
8906	BD−12° 6008	G0	8.8	8.6	21 25 8.507	+3.2569	− .0103	+ .0014	−12 25 43.89	+15.640	+ .290	− .015	4	18.48
8907	Pi 21ʰ 145	F2	6.54	6.47	25 30.347	3.3681	− .0144	+ .0017	−19 29 51.33	15.660	.299	− .034	4	18.94
8908	BD+ 6° 4839	K2	7.8	7.84	25 39.064	2.9773	− .0020	+ .001	+ 6 31 45.95	15.668	.264	− .01	4	18.17
8909	BD+ 0° 4736	F0	8.89	8.65	25 47.480	3.0545	− .0040	− .0016	+ 1 15 18.31	15.676	.272	+ .001	4	18.04
8910	BD−10° 5686	F2	9.8		25 51.820	3.2295	− .0094	.0000	−10 40 8.64	15.680	.287	+ .039	4	18.42
8911	BD+73° 932	G5	9.22	9.2	21 26 1.86	+0.2974	− .0662	− .0012	+73 10 1.22	+15.689	+ .020	− .053	4	17.79
8912	BD+77° 819	K0	8.77	9.21	26 5.29	−0.6889	− .1560	+ .0083	+77 32 6.42	15.692	− .069	− .007	4	18.85
8913	BD− 2° 5551	A2	8.4	7.96	26 6.123	+3.1001	− .0053	+ .0013	− 1 53 7.82	15.693	+ .275	− .026	4	17.89
8914	BD+61° 2137		9.72		26 6.88	1.5064	− .0047	.000	+62 2 30.44	15.694	.130	.00	4	18.52
8915	BD−14° 6047	K0	6.84	6.5	26 17.556	3.2897	− .0115	+ .0005	−14 38 31.17	15.703	.292	− .038	4	17.74
8916	g Cygni	K0	5.34	5.40	21 26 29.693	+2.2080	+ .0066	+ .0044	+46 11 14.34	+15.714	+ .193	+ .104	5 4	18.17 18.84
8917	BD+14° 4618	G0	8.7	8.9	26 32.618	2.8580	+ .0009	− .003	+14 30 59.63	15.717	.252	+ .01	4	18.48
8918	Lal 41886	A0	7.17	7.30	26 46.584	2.4901	+ .0060	− .0006	+35 7 15.48	15.730	.218	− .006	4	18.50
8919	BD+60° 2252	F5	7.11	7.16	26 57.52	1.5749	− .0027	− .005	+61 4 55.22	15.740	.135	− .01	4	18.65
8920	BD+15° 4435	A5	7.9	8.34	27 10.510	2.8323	+ .0015	− .003	+16 13 10.43	15.751	.249	− .02	4	18.23
8921	BD− 4° 5472	G0	9.0		21 27 12.892	+3.1338	− .0063	+ .0004	− 4 13 49.09	+15.753	+ .277	+ .011	4	18.28
8922	β Aquarii	G0	3.07	3.13	27 20.925	3.1584	− .0071	+ .0010	− 5 55 25.58	15.761	.278	− .007	84 79	19.31 19.40
8923	Brad 2794 br.	A2	5.99		27 24.554	3.6357	− .0266	− .0027	−34 17 52.22	15.763	.321	− .027	5	18.62
8924	BD+24° 4418	M0	9.0	8.28	27 31.563	2.6915	+ .0039	+ .0020	+24 48 12.68	15.770	.236	+ .013	4	18.07
8925	β Cephei br.	B1	3.33	3.36	27 38.02	0.7816	− .0355	+ .0022	+70 12 33.52	15.776	.063	+ .005	12	19.40
8926	Pi 21ʰ 161	A5	6.42	6.45	21 27 56.956	+3.4555	− .0182	+ .0050	−24 56 39.82	+15.793	+ .305	− .008	4	18.51
8927	BD+12° 4644		9.6	8.1	27 59.833	2.8897	+ .0003	− .002	+12 32 24.75	15.796	.253	+ .01	4	18.26
8928	BD−16° 5881	A5	8.6		28 0.506	3.3096	− .0124	+ .0048	−16 3 49.05	15.796	.290	+ .024	4	18.44
8929	BD+44° 3844		9.3	9.1	28 1.778	+2.2554	+ .0069	.000	+44 48 51.59	15.797	+ .196	.00	4	17.71
8930	BD+79° 708		8.62	8.79	28 10.47	−1.3424	− .2395	− .0044	+79 27 15.67	15.805	− .127	− .020	4	18.66
8931	CD−27° 15496	K0	8.1	7.1	21 28 24.436	+3.4970	− .0201	+ .0013	−27 19 51.59	+15.818	+ .306	− .014	4	17.90
8932	BD+ 4° 4697	F0	7.26	7.20	28 31.708	3.0079	− .0026	+ .0015	+ 4 31 10.17	15.824	.262	− .010	4	18.44
8933	BD+49° 3544	A2	8.48	8.9	28 42.488	2.1194	+ .0064	− .001	+49 19 1.84	15.834	.183	+ .02	4	18.30
8934	BD+ 9° 4839		9.08	9.1	29 7.567	2.9959	− .0008	− .001	+ 9 30 11.80	15.856	.255	.00	4	18.64
8935	BD+17° 4603	K5	8.7	8.14	29 16.855	2.8172	+ .0019	.000	+17 22 5.41	15.861	.247	+ .02	5	16.71
8936	BD+35° 4561	F0	8.37	8.50	21 29 26.566	+2.4925	+ .0063	+ .001	+35 24 37.02	+15.873	+ .215	+ .03	4	18.46
8937	BD+53° 2642	B9	7.75	7.9	29 26.602	1.9633	+ .0060	.000	+53 39 40.55	15.873	.168	.00	4	18.43
8938	BD− 6° 5781	A0	8.2	7.60	29 34.041	3.1552	− .0070	+ .002	− 6 46 21.81	15.880	.274	− .02	4	18.05
8939	BD+57° 2344	A5	7.87	8.08	29 39.189	+1.7553	+ .0016	.000	+58 15 16.10	15.884	+ .150	+ .03	4	18.62
8940	BD+82° 651	F8	8.90	8.67	29 42.95	−3.7789	− .6000	+ .0056	+83 13 6.34	15.887	− .343	− .063	4	18.07

8905. 7^m4–7^m4, 1″5, 200°.

8923. 13^m, 6″7, 50°.

8925. 8^m0, 14″, 250°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
8941	BD− 0° 4238	K2	8.3	8.44	21 29 49.510	+3.0746	−0.0044	−0.0011	− 0 7 52.83	+15.894	+0.266	+0.007	4	18.42
8942	BD+40° 4565		9.0	9.2	29 58.692	2.3825	+ .0069	+ .003	+40 18 39.03	15.902	.205	.00	4	18.11
8943	BD+26° 4197	K5	8.1	7.87	30 3.063	2.6539	+ .0047	+ .0006	+27 14 50.26	15.906	.229	+ .008	4	17.89
8944	BD−18° 5965	A2	9.6		30 5.696	3.3396	− .0137	+ .0225	−18 10 10.68	15.908	.289	− .004	4	18.47
8945	BD+ 1° 4502	K0	8.7	8.75	30 32.799	3.0458	− .0036	− .0006	+ 1 54 4.15	15.932	.263	− .016	4	17.55
8946	BD+36° 4608		*9.85*	ft.	21 30 33.584	+2.4640	+ .0067	− .001	+36 53 31.28	+15.932	+ .212	− .04	4	18.25
8947	Wi (2) 21^{h} 672	F8	6.37	6.65	30 54.613	2.7392	+ .0034	+ .0010	+22 23 56.59	15.951	.233	− .044	4	18.30
8948	ρ Cygni	K0	4.22	4.30	30 58.177	2.2569	+ .0072	− .0026	+45 14 15.61	15.955	.193	− .095	4	18.96
8949	BD−21° 6049	F5	9.2		31 19.471	3.3896	− .0158	− .0045	−21 25 55.36	15.973	.292	− .070	4	18.75
8950	BD−10° 5711	K0	8.6	8.58	31 23.680	3.2200	− .0092	− .0010	−10 20 29.28	15.977	.277	− .006	4	18.08
8951	BD+56° 2594	B9	*9.12*	8.9	21 31 27.898	+1.8334	+ .0032	− .003	+56 56 13.47	+15.980	+ .154	− .01	4	17.53
8952	72 Cygni	K0	4.98	4.94	31 30.341	2.4387	+ .0069	+ .0098	+38 10 29.19	15.983	.208	+ .091	5	18.86
8953	BD+18° 4820	F2	7.9	7.71	31 44.916	2.8015	+ .0024	.000	+18 36 36.63	15.995	.239	− .06	4	17.50
8954	BD+32° 4200		*9.36*	9.4	31 52.018	2.5611	+ .0060	.000	+32 26 33.30	16.001	.218	− .02	4	17.54
8955	BD+74° 921		*9.40*		32 1.78	0.1756	− .0792	+ .0077	+74 29 13.26	16.010	.009	+ .032	4	18.08
8956	BD+21° 4580	G5	*9.38*		21 32 33.393	+2.7602	+ .0032	− .002	+21 17 57.82	+16.038	+ .234	− .03	4	17.75
8957	ε Capricorni	B5	4.72	4.88	32 36.215	3.3616	− .0147	+ .0006	−19 49 30.15	16.041	.287	− .002	4	18.12
8958	CD−28° 17381	G0	9.5		32 44.720	3.4983	− .0208	+ .0241	−27 59 23.67	16.048	.298	− .212	4	18.27
8959	BD− 2° 5582	G5	9.9		32 54.198	3.0996	− .0052	− .0007	− 1 55 41.62	16.056	.264	− .007	4	18.24
8960	BD+ 3° 4584	F5	*9.8*		32 57.072	3.0232	− .0030	− .0026	+ 3 32 40.86	16.058	.258	− .034	4	17.67
8961	BD−12° 6044	Ma	7.6	7.47	21 33 1.059	+3.2400	− .0100	− .0008	−11 49 12.34	+16.062	+ .276	+ .014	4	18.12
8962	BD+41° 4207		9.1		33 9.904	2.3631	+ .0074	+ .003	+41 37 1.95	16.070	.199	− .04	4	17.54
8963	Wi (1) 21^{h} 712	A0	7.20	6.81	33 13.381	2.9123	+ .0001	+ .0013	+11 21 34.97	16.073	.247	+ .004	5	17.68
8964	Oelt 22542	B9	7.00	7.22	33 19.913	2.1168	+ .0069	+ .0039	+50 8 33.42	16.079	.178	+ .018	5	17.20
8965	BD+52° 2983	F2	*7.92*	7.63	33 21.840	2.0345	+ .0061	+ .005	+52 27 27.81	16.080	.170	− .05	4	17.98
8966	BD+64° 1569	A0	7.93	7.84	21 33 26.35	+1.3444	− .0101	+ .0067	+65 13 45.08	+16.084	+ .110	− .010	4	18.12
8967	ξ Aquarii	A5	4.78	4.67	33 29.663	3.1878	− .0081	+ .0075	− 8 12 49.05	16.087	.270	− .024	119 98	19.06 19.31
8968	74 Cygni	A5	5.09	5.35	33 44.393	2.4034	+ .0073	− .0004	+40 3 13.24	16.100	.202	+ .008	10	21.08
8969	BD−14° 6088	A0	8.0	8.02	33 54.071	3.2694	− .0112	.0000	−13 53 38.26	16.108	.277	− .005	4	17.93
8970	BD+33° 4309	G0	7.82	7.98	34 0.666	2.5317	+ .0065	+ .006	+34 14 32.21	16.114	.213	+ .03	4	18.15
8971	BD+46° 3399		8.8	8.42	21 35 36.170	+2.2439	+ .0078	− .001	+46 28 3.78	+16.196	+ .186	.00	4	17.71
8972	γ Capricorni	F0	3.80	3.94	35 39.625	3.3137	− .0130	+ .0131	−17 1 27.57	16.199	.278	− .021	5	18.34
8973	BD+42° 4169		8.9	9.4	35 42.444	2.3372	+ .0078	− .001	+43 4 22.21	16.202	.194	− .02	4	18.38
8974	CD−28° 17401	G5	9.9		35 45.086	3.4987	− .0212	+ .0004	−28 26 20.14	16.204	.294	− .062	4	18.42
8975	Brad 2830	B2	4.87	4.96	35 46.43	1.6106	− .0015	+ .0007	+61 43 14.33	16.205	.131	+ .002	5	18.36
8976	BD+17° 4619	A0	*8.62*	8.44	21 35 54.343	+2.8233	+ .0022	− .003	+17 36 25.10	+16.212	+ .235	.00	5	17.95
8977	BD+23° 4362	G0	*8.85*	8.7	35 59.395	2.7236	+ .0042	.000	+23 57 41.80	16.216	.227	+ .02	4	18.14
8978	BD−16° 5913	K0	9.7	ft.	36 3.539	3.2953	− .0123	− .0004	−15 49 29.62	16.220	.276	− .016	4	18.28
8979	BD+ 5° 4841	F5	8.71	8.89	36 5.668	2.9996	− .0022	− .0001	+ 5 19 20.55	16.222	.250	− .020	4	17.89
8980	CD−24° 16766	K5	8.1	8.61	36 7.707	3.4266	− .0179	− .0002	−24 16 10.61	16.223	.287	+ .029	4	18.48
8981	BD+11° 4626		*9.16*	9.1	21 36 12.392	+2.9098	+ .0002	− .002	+11 43 48.22	+16.227	+ .242	− .01	4	17.98
8982	BD+29° 4476	A2	*8.40*	8.60	36 17.512	2.6276	+ .0056	+ .0013	+29 34 53.04	16.232	.218	+ .002	4	17.55
8983	BD+ 8° 4715		9.2		36 21.055	2.9535	− .0009	− .002	+ 8 38 48.93	16.235	.246	.00	4	18.64
8984	BD+ 6° 4880	F5	*9.34*		36 23.782	2.9775	− .0015	− .005	+ 6 55 29.44	16.238	.247	− .02	4	17.70
8985	13 H Cephei *br.*	O5	5.97	5.46	36 28.601	1.8608	+ .0041	+ .0005	+57 7 36.62	16.241	.152	+ .002	4	18.68
8986	BD− 4° 5512	K5	9.0	8.9	21 36 31.523	+3.1263	− .0061	+ .0042	− 3 55 1.54	+16.245	+ .260	+ .038	4	17.79
8987	BD−10° 5737	K0	9.9		37 8.424	3.2102	− .0090	− .0003	− 9 59 46.03	16.275	.266	− .011	4	18.44
8988	CD−26° 15756	Ma	7.50	7.25	37 28.296	3.4562	− .0194	+ .0008	−26 13 28.50	16.292	.286	− .024	4	17.70
8989	BD+26° 4237	G5	7.43	7.36	37 28.938	+2.6865	+ .0049	+ .0264	+26 23 19.18	16.293	+ .221	− .086	4	17.80
8990	BD+78° 759	A3	9.08	9.53	37 34.35	−0.8180	− .1887	+ .0007	+78 41 28.56	16.297	− .076	+ .010	4	17.82
8991	BD+15° 4475		*9.22*	9.23	21 37 40.822	+2.8483	+ .0018	+ .002	+16 5 52.88	+16.303	+ .235	+ .01	4	18.23
8992	BD+14° 4658	A2	8.5	8.56	37 47.642	2.8747	+ .0012	− .002	+14 17 39.57	16.309	.237	.00	4	18.42
8993	Brad 2822	K5	5.80	5.56	38 5.378	3.0602	− .0038	− .0003	+ 0 55 13.71	16.324	.252	− .014	4	18.13
8994	BD− 6° 5804	K5	8.6		38 8.741	3.1543	− .0070	− .002	− 6 0 15.29	16.326	.260	− .04	4	17.76
8995	Grmb 3550	K0	6.95	6.79	38 10.722	1.7626	+ .0023	+ .0088	+59 23 16.68	16.328	.141	+ .027	4	17.51
8996	κ Capricorni	G5	4.82	4.83	21 38 11.606	+3.3431	− .0143	+ .0100	−19 13 53.53	+16.329	+ .276	− .007	4	18.16
8997	BD+67° 1339	K0	*8.02*	8.29	38 12.54	1.1296	− .0196	− .0007	+68 15 16.34	16.330	.089	+ .005	4	17.74
8998	BD+31° 4529		9.0	8.8	38 19.197	2.5940	+ .0063	+ .0003	+31 43 2.73	16.335	.212	+ .015	4	17.27
8999	BD+40° 4611	A0	6.05	6.02	38 21.068	2.4127	+ .0078	− .0009	+40 26 29.10	16.337	.197	− .051	4	17.66
9000	BD+28° 4166	G	*8.71*	8.4	38 50.476	2.6563	+ .0055	+ .0015	+28 20 35.67	16.362	.216	− .005	4	17.77

8985. 14^{m}, 1$''$.6, 324°; 7^{m}.5, 12″, 120°; 8^{m}.0, 20″, 340°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9001	Lal 42379	Mb	6.47	5.95	21 39 4.774	+2.2910	+0.0082	−0.0006	+45 24 2.06	+16.374	+0.186	−0.005	4	17.87
9002	BD−18° 5998	K5	8.2	7.99	39 7.165	3.3195	− .0135	+ .0010	−17 45 11.75	16.376	.272	− .019	4	18.19
9003	BD− 8° 5719	K0	8.2	7.90	39 10.836	3.1779	− .0079	+ .002	− 7 46 28.72	16.379	.260	+ .04	4	17.87
9004	BD− 0° 4254	A0	8.5	9.19	39 22.879	3.0769	− .0044	− .0021	− 0 18 51.60	[illegible]	.251	− .047	4	18.17
9005	BD−20° 6278	A0	9.2	8.5	39 35.283	3.3571	− .0151	− .0011	−20 18 17.64	[illegible]	.275	− .039	4	18.17
9006	BD+37° 4405		8.2	7.70	21 39 39.119	+2.4764	+ .0077	− .005	+37 49 10.07	+16.403	+ .200	− .04	8	20.57
9007	Lal 42352	K0	6.74	6.52	39 41.815	2.9762	− .0013	− .0029	+ 7 9 47.20	16.405	.243	− .048	4	17.76
9008	ι Pis Aus	A0	4.35		40 11.201	3.5774	− .0259	+ .0029	−33 23 28.76	16.429	.292	− .086	4	18.28
9009	ε Pegasi	K0	2.54	2.67	40 15.388	2.9445	− .0004	+ .0017	+ 9 30 27.59	16.432	.238	− .001	130 117	19.43 19.58
9010	11 Cephei	K0	4.85	4.81	40 45.28	0.8643	− .0343	+ .0240	+70 56 34.38	16.458	.065	+ .097	13	19.40
9011	BD−22° 5756	G0	9.0		21 40 49.607	+3.3846	− .0164	− .0042	−22 14 32.15	+16.461	+ .274	− .116	4	17.53
9012	κ Pegasi *m.*	F5	4.27	4.45	41 1.265	2.7131	+ .0049	+ .0024	+25 16 36.26	16.471	.219	+ .002	4	18.92
9013	BD+63° 1768	F0	*8.65*	8.06	41 5.33	1.5216	− .0040	− .007	+63 51 31.21	16.475	.119	+ .01	4	18.23
9014	BD+53° 2694	K0	*8.22*	8.00	41 19.413	2.0296	+ .0070	− .006	+53 54 57.86	16.486	.161	+ .01	5	17.62
9015	BD+ 0° 4776	K2	8.69	8.45	41 39.628	3.0555	− .0037	− .0006	+ 1 18 1.87	16.503	.246	+ .001	4	17.91
9016	BD+ 7° 4745	G5	7.34	7.09	21 41 48.758	+2.9713	− .0011	− .004	+ 7 37 7.38	+16.510	+ .238	+ .01	4	18.16
9017	BD+81° 752		*9.42*		42 7.05	−2.0748	− .3958	+ .0083	+81 38 28.19	16.526	− .178	.000	4	17.98
9018	λ Capricorni	A0	5.43	5.3	42 13.851	+3.2297	− .0099	+ .0016	−11 44 8.01	16.531	+ .259	− .011	4	18.26
9019	Lal 42470	K0	6.60	5.97	42 20.766	+2.5343	+ .0074	+ .0062	+35 29 15.95	16.537	.202	+ .011	4	17.89
9020	Wi (1) 21^h 942	Mb	7.16	6.97	42 23.274	3.1068	− .0053	+ .0014	− 2 34 58.91	16.539	.249	+ .017	4	17.82
9021	δ Capricorni	A5	2.98	3.18	21 42 37.620	+3.2959	− .0126	+ .0179	−16 29 26.83	+16.551	+ .263	− .295	5	18.21
9022	BD+13° 4781	A3	6.57	6.73	42 54.453	2.8941	+ .0010	+ .001	+13 20 57.07	16.565	.231	+ .02	4	17.25
9023	BD− 5° 5637	A3	9.2		42 57.770	3.1458	− .0067	+ .001	− 5 32 55.85	16.567	.252	.00	4	17.88
9024	θ Pis Aus	A2	5.09	5.02	43 2.765	3.5293	− .0239	− .0028	−31 16 9.47	16.571	.282	− .006	4	18.69
9025	BD+42° 4204	A0	6.43	6.57	43 5.779	2.3793	+ .0087	+ .0007	+42 41 26.13	16.574	.189	+ .005	4	17.75
9026	ν Cephei	A2	4.46	4.66	21 43 8.43	+1.7309	+ .0020	− .0003	+60 45 4.51	+16.576	+ .135	.000	4	17.84
9027	11 Pegasi	A0	5.50	5.72	43 10.594	3.0423	− .0031	+ .0009	+ 2 18 56.15	16.578	.242	− .003	4	17.58
9028	Brad 2853	F0	6.24	5.98	43 16.390	2.8457	+ .0023	+ .0065	+16 49 25.88	[illegible]	.226	− .014	4	17.75
9029	BD+32° 4254	F2	7.93	8.10	43 21.269	2.5923	+ .0068	.000	+32 37 34.42	16.587	.205	− .02	4	17.72
9030	BD+23° 4392	K0	7.8	7.35	43 30.474	2.7425	+ .0045	− .004	+23 46 26.86	16.594	.217	+ .02	4	18.44
9031	BD+58° 2324	A0	*8.95*	9.39	21 43 36.144	+1.8181	+ .0039	+ .004	+59 9 21.21	+16.599	+ .141	+ .02	4	18.03
9032	BD+18° 4861	K2	*8.19*	8.4	43 36.177	2.8187	+ .0030	.000	+18 43 35.48	[illegible]	.223	+ .01	4	18.05
9033	CD−24° 16836	F0	8.5	7.8	43 38.129	3.4130	− .0180	+ .0019	−24 25 37.88	16.600	.262	+ .015	4	18.19
9034	BD+51° 3144	B2	7.45	7.61	43 44.228	2.1231	+ .0082	− .0005	+51 45 13.14	16.605	.166	+ .004	4	18.32
9035	π² Cygni	B3	4.26	4.30	43 50.131	2.2141	+ .0087	+ .0004	+48 56 19.99	16.611	.173	− .003	4	17.67
9036	BD+ 9° 4899	G0	8.5	8.54	21 44 4.220	+2.9481	− .0003	− .006	+ 9 28 29.20	+16.622	+ .234	− .02	4	18.11
9037	BD+27° 4165	G0	*9.53*		44 6.361	2.6774	+ .0058	+ .0025	+27 53 33.62	16.623	.211	+ .023	4	17.77
9038	BD+46° 3437		9.3		44 14.498	2.2903	+ .0089	− .004	+46 21 38.13	16.630	.179	.00	4	18.05
9039	BD−15° 6075	A2	7.69	7.6	44 50.674	3.2787	− .0120	+. 0012	−15 29 35.89	16.659	.258	+ .011	4	17.61
9040	BD−14° 6133	A2	8.2	8.4	45 6.737	3.2572	− .0112	+ .0019	−13 58 0.43	16.672	.257	− .015	4	17.65
9041	CD−26° 15831 *m.*	F0	9.1		21 45 10.616	+3.4346	− .0193	+ .0010	−26 0 54.78	+16.676	+ .271	+ .007	4	18.26
9042	Lac 8934	A0	7.15	7.14	45 17.258	3.4630	− .0207	+ .0013	−27 46 36.62	16.681	.274	− .031	4	18.19
9043	BD+25° 4622	A	*9.19*	8.8	45 26.075	2.7095	+ .0053	+ .0006	+26 8 2.95	[illegible]	.212	+ .013	4	17.57
9044	BD+ 6° 4909	F8	*9.17*	9.5	45 28.971	2.9824	− .0012	− .004	+ 6 57 37.57	[illegible]	.234	+ .03	4	18.09
9045	BD−17° 6389	K0	6.47	[illegible]	45 49.142	3.3016	− .0131	+ .0020	−17 13 6.46	16.707	.259	− .008	4	18.05
9046	BD+57° 2402	A2	*8.17*	[illegible]	21 45 51.598	+1.9147	+ .0060	.000	+57 28 54.74	+16.709	+ .147	.00	4	18.08
9047	BD+71° 1090		*9.22*		45 [illegible]	0.7631	− .0424	+ .0020	+72 17 11.19	16.714	.054	− .007	4	18.31
9048	BD+20° 5021	F5	*9.37*		46 8.127	2.7997	+ .0036	.000	+20 19 33.85	16.722	.218	.00	4	18.28
9049	BD+47° 3565	F8	8.1	7.97	46 11.669	2.2527	+ .0092	− .008	+48 3 54.70	16.725	.174	− .03	5	17.71
9050	14 Pegasi	A0	5.00	5.23	46 18.198	2.6511	+ .0064	+ .0020	+29 48 4.16	16.730	.205	− .027	4	17.96
9051	BD− 9° 5854	K0	6.75	6.48	21 46 19.789	+3.1940	− .0086	+ .003	− 9 21 20.48	+16.731	+ .249	− .03	4	17.79
9052	Wi (2) 21^h 1080	A0	6.49	6.50	46 [illegible]	2.4383	+ .0088	− .0004	+40 46 31.19	16.735	.188	+ .003	4	17.96
9053	BD+15° 4509		9.2	9.3	46 [illegible]	2.8698	+ .0019	− .004	+15 26 12.82	16.744	.223	− .05	4	18.29
9054	BD+55° 2633	K5	*8.87*	8.8	46 42.[illegible]	1.9767	+ .0070	− .002	+55 11 8.13	16.750	.151	− .01	4	17.98
9055	Pi 21^h 301	F8	6.85	6.58	46 51.566	3.3938	− .0174	+ .0243	−23 38 36.67	16.757	[illegible]	− .088	4	18.01
9056	BD+75° 802		[illegible]		21 46 59.20	+0.1737	− .0905	− .0030	+75 48 53.20	+16.763	+ .007	− .001	4	18.31
9057	BD−21° 6108	K5	9.1	8.31	47 21.261	3.3624	− .0160	− .0060	−21 37 2.06	16.780	.262	+ .018	4	17.79
9058	BD+43° 4063		10.3		47 29.676	2.3804	+ .0092	− .001	+43 28 14.37	16.787	.183	− .01	4	18.26
9059	BD+22° 4493	K0	*8.09*	7.70	47 36.989	2.7707	+ .0044	+ .001	+22 29 4.87	[illegible]	.214	+ .02	4	17.75
9060	BD− 7° 5656	K5	10.1		47 53.503	3.1660	− .0075	+ .001	− 7 20 40.29	16.806	.244	+ .01	5	17.93

9012. 540–541, <0″2, 11.5 yrs.

9041. 996–1003, 279, 305°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9061	BD+80° 706	F2	8. 30	8. 38	21 47 53. 67	−1. 2044	−0. 2647	+0. 0079	+80 20 13. 20	+16. 806	−0. 103	−0. 007	5	18. 17
9062	BD− 1° 4212	F8	8. 47	8. 9	47 57. 207	+3. 0938	− . 0048	+ . 0018	− 1 39 38. 10	16. 809	+ . 239	− . 015	4	17. 99
9063	BD+54° 2634	G	*8. 72*	8. 88	48 1. 125	2. 0320	+ . 0079	+ . 002	+55 2 10. 45	16. 812	. 154	+ . 03	4	18. 35
9064	BD+36° 4695		*9. 27*		48 12. 904	2. 5335	+ . 0082	+ . 001	+36 34 20. 18	16. 821	. 193	− . 03	4	18. 18
9065	BD−20° 6308	K2	8. 2	8. 08	48 13. 909	3. 3358	− . 0148	− . 0016	−19 53 56. 57	16. 822	. 257	− . 006	4	17. 93
9066	CD−29° 18059	K0	9. 4		21 48 18. 477	+3. 4777	− . 0219	− . 0006	−29 8 31. 55	+16. 826	+ . 268	− . 015	4	18. 47
9067	BD−13° 6037	G5	8. 6	8. 5	48 35. 584	3. 2448	− . 0108	− . 0025	−13 21 10. 83	16. 839	. 249	− . 096	4	18. 21
9068	BD+ 5° 4890		10. 7		48 40. 099	3. 0020	− . 0017	− . 0052	+ 5 34 21. 52	16. 843	. 230	− . 027	5	19. 94
9069	BD+49° 3647	A2	8. 9	8. 93	48 42. 414	2. 2207	+ . 0094	+ . 002	+49 37 46. 91	16. 845	. 168	. 00	4	18. 25
9070	BD+ 2° 4435		*8. 82*	8. 87	48 54. 241	3. 0328	− . 0027	− . 0021	+ 3 9 18. 71	16. 854	. 233	− . 028	4	18. 20
9071	μ Capricorni	F0	5. 18	4. 89	21 48 56. 181	+3. 2521	− . 0111	+ . 0211	−13 55 44. 19	+16. 856	+ . 249	+ . 009	89 77	19. 45 19. 89
9072	BD+39° 4696		*9. 27*	9. 4	49 5. 019	2. 4659	+ . 0090	+ . 009	+40 1 34. 18	16. 863	. 187	. 00	4	18. 23
9073	16 Pegasi	B3	5. 05	5. 26	49 25. 248	2. 7281	+ . 0055	+ . 0001	+25 32 53. 57	16. 879	. 207	+ . 001	4	18. 48
9074	BD+10° 4651	K0	*7. 6*	8. 26	49 30. 635	2. 9293	+ . 0006	− . 005	+11 15 27. 01	16. 883	. 224	. 00	4	17. 99
9075	BD+ 1° 4555	A0	*9. 33*		49 37. 372	3. 0442	− . 0031	+ . 0001	+ 2 15 57. 77	16. 888	. 232	− . 012	4	18. 61
9076	Grmb 3600	K0	7. 01	6. 96	21 49 40. 781	+2. 0711	+ . 0086	+ . 0024	+54 18 21. 12	+16. 891	+ . 155	+ . 024	[illegible]	18. 12
9077	BD+66° 1447		*9. 42*		49 51. 27	1. 4220	− . 0076	− . 0005	+66 28 16. 77	16. 899	. 104	+ . 018	4	18. 18
9078	BD+33° 4375	A0	*8. 37*	8. 02	49 55. 887	2. 5899	+ . 0078	. 000	+33 54 16. 55	16. 903	. 196	− . 02	[illegible]	17. 37
9079	Brad 2868	K0	6. 86	6. 93	50 25. 176	2. 0178	+ . 0080	+ . 0032	+55 50 6. 18	16. 926	. 150	+ . 007	5	18. 99
9080	BD− 3° 5331	A0	7. 44	7. 86	50 26. 666	3. 1149	− . 0056	+ . 0009	− 3 22 31. 18	16. 927	. 236	+ . 020	4	18. 01
9081	BD+50° 3472	B3	*8. 65*	8. 83	21 50 31. 970	+2. 1853	+ . 0096	+ . 002	+51 7 30. 95	+16. 931	+ . 164	. 00	4	18. 26
9082	BD−11° 5701	G0	9. 9		50 57. 260	3. 2122	− . 0094	+ . 0019	−11 3 56. 65	16. 951	. 243	+ . 043	4 5	18. 50 17. 90
9083	BD+14° 4692	A3	*8. 00*	8. 06	51 2. 757	2. 8837	+ . 0019	+ . 003	+14 50 50. 37	16. 955	. 216	− . 01	[illegible]	17. 51
9084	BD+45° 3716		8. 7	8. 6	51 4. 828	2. 3289	+ . 0099	+ . 001	+46 13 20. 71	16. 957	. 174	− . 01	4	17. 68
9085	BD+67° 1370	A	*8. 97*	8. 67	51 9. 60	1. 3341	− . 0113	+ . 0058	+67 43 15. 04	16. 960	. 096	− . 016	4	18. 14
9086	BD+37° 4451	K0	9. 3	8. 73	21 51 20. 432	+2. 5198	+ . 0088	+ . 017	+37 51 21. 79	+16. 969	+ . 188	+ . 06	7	20. 32
9087	Lal 42748	K5	7. 10	7. 37	51 23. 775	2. 6290	+ . 0074	+ . 0007	+31 57 35. 69	16. 971	. 197	+ . 015	4	18. 07
9088	BD+56° 2661	F5	*9. 72*		51 41. 608	1. 9772	+ . 0077	− . 001	+57 3 55. 06	16. 985	. 146	+ . 01	4	18. 50
9089	BD+25° 4643	G5	*8. 47*	8. 80	51 48. 286	2. 7337	+ . 0056	+ . 0034	+25 33 11. 11	16. 990	. 204	+ . 006	4	17. 99
9090	158 B Cephei	A0	6. 58	6. 64	51 51. 21	0. 7064	− . 0486	+ . 0107	+73 19 25. 44	16. 992	. 047	+ . 029	8 7	17. 99 18. 55
9091	BD+30° 4558	K0	7. 96	7. 80	21 51 51. 950	+2. 6560	+ . 0070	+ . 0042	+30 26 55. 62	+16. 993	+ . 198	+ . 014	4 5	18. 26 17. 59
9092	CD−26° 15895	G5	7. 6	7. 48	51 56. 615	3. 4163	− . 0192	+ . 0053	−25 52 48. 48	16. 997	. 257	+ . 020	4	18. 58
9093	BD+68° 1258		*8. 07*	8. 37	52 7. 68	1. 2839	− . 0137	+ . 0027	+68 25 9. 74	17. 005	. 092	+ . 005	4	17. 89
9094	13 Cephei	B9	6. 01	5. 88	52 11. 681	2. 0150	+ . 0082	− . 0009	+56 13 55. 05	17. 008	. 148	− . 004	4	18. 84
9095	BD+ 6° 4929		8. 7	8. 7	52 19. 845	2. 9838	− . 0009	− . 001	+ 7 10 27. 96	17. 015	. 222	+ . 02	[illegible]	17. 72
[illegible]	Wi (2) 21^{h} 1209	K5	6. 62	6. 23	21 52 39. 474	+2. 8041	+ . 0042	. 0000	+20 51 33. 32	+17. 030	+ . 208	+ . 020	4	17. 87
9097	BD+61° 2221	K0	*7. 21*	6. 96	52 39. 97	1. 7676	+ . 0037	− . 002	+61 37 46. 40	17. 030	. 129	− . 05	4	17. 51
9098	Brad 2869	A2	5. 59	5. 87	53 2. 256	2. 9272	+ . 0009	− . 0020	+11 41 45. 67	17. 047	. 217	− . 021	4	18. 21
9099	CD−27° 15702	K2	9. 5		53 3. 927	3. 4324	− . 0201	− . 0001	−27 6 4. 01	17. 048	. 256	− . 059	4	17. 49
9100	BD+16° 4632	K0	*8. 26*	7. 73	53 4. 579	+2. 8570	+ . 0029	− . 002	+17 3 32. 57	17. 049	+ . 212	. 00	4	17. 38
9101	Brad 2894	K5	6. 80	6. 91	21 53 6. 96	−0. 6012	− . 1872	+ . 0041	+79 10 23. 16	+17. 051	− . 053	+ . 026	8	18. 40
9102	BD+34° 4571	A0	*8. 96*	8. 62	53 45. 935	+2. 5836	+ . 0084	+ . 002	+34 58 5. 83	17. 081	+ . 190	+ . 02	5	18. 58
9103	BD− 0° 4288	K0	8. 13	8. 01	53 47. 522	3. 0700	− . 0039	− . 0008	+ 0 13 5. 79	17. 082	. 227	− . 003	4	17. 86
9104	BD−15° 6104	K2	8. 7	7. 7	53 50. 833	3. 2662	− . 0120	+ . 0011	−15 28 22. 38	17. 084	. 241	− . 026	4	17. 79
9105	BD− 6° 5879	G0	8. 8		54 12. 623	3. 1528	− . 0070	+ . 001	− 6 32 11. 56	17. 101	. 232	− . 03	4	17. 92
9106	BD+28° 4253	K0	*8. 82*	8. 50	21 54 13. 307	+2. 6972	+ . 0067	+ . 0006	+28 18 36. 25	+17. 101	+ . 198	− . 032	4	17. 79
9107	BD+47° 3622	A0	7. 98	8. 53	54 22. 597	2. 3086	+ . 0105	. 000	+47 39 26. 00	17. 108	. 168	− . 01	4	18. 04
9108	BD+62° 2007	Ma	5. 35	5. 18	54 23. 73	1. 6917	+ . 0018	− . 0014	+63 14 39. 79	17. 109	. 121	+ . 008	[illegible]	17. 80
9109	Wi (1) 21^{h} 1200	F8	7. 07	7. 12	54 27. 271	3. 0314	− . 0023	− . 0173	+ 3 23 51. 78	17. 112	. 223	− . 135	4	17. 55
9110	Lal 42846	K0	6. 42	6. 44	54 44. 710	3. 1304	− . 0061	− . 0006	− 4 45 0. 15	17. 125	. 230	− . 252	4	17. 95
9111	BD+17° 4667		*10. 05*		21 54 57. 114	+2. 8482	+ . 0033	+ . 004	+17 56 8. 71	+17. 135	+ . 208	+ . 04	5 4	17. 56 18. 33
9112	BD−17° 6412	G0	8. 0	8. 14	55 2. 426	3. 2938	− . 0133	+ . 0042	−17 41 33. 86	17. 139	. 242	− . 030	4	18. 01
9113	Grmb 3637	B3	6. 28	6. 44	55 8. 40	1. 5334	− . 0034	+ . 0002	+65 46 27. 17	17. 143	. 108	− . 002	4	18. 03
9114	BD+21° 4661	G5	8. 8	8. 4	55 37. 611	2. 7971	+ . 0046	+ . 001	+21 46 12. 67	17. 164	. 203	+ . 02	4	17. 95
9115	BD+41° 4333	B9	7. 23	7. 13	55 38. 101	2. 4662	+ . 0100	. 000	+41 18 47. 39	17. 166	. 178	− . 02	4	17. 66
9116	BD+13° 4818		*8. 85*	9. 2	21 55 43. 843	+2. 9011	+ . 0019	− . 001	+13 58 37. 49	+17. 170	+ . 212	[illegible]	4	18. 07
9117	BD−11° 5729	G0	8. 7	8. 8	56 3. 922	3. 2049	− . 0092	+ . 0068	−10 52 32. 13	17. 184	. 233	+ . 031	4	17. 89
9118	η Pis Aus *n. pr.*	B8	5. 95	5. 3	56 14. 697	3. 4510	− . 0216	+ . 0011	−28 50 17. 89	17. 193	. 251	+ . 002	5	18. 68
9119	BD− 9° 5884	G5	8. 6	8. 5	56 20. 612	3. 1803	− . 0082	. 000	− 8 54 35. 95	17. 197	. 231	− . 01	4	17. 73
9120	BD+63° 1792	G5	*8. 57*	9. 1	56 29. 41	1. 6552	+ . 0008	+ . 0092	+64 10 54. 03	17. 204	. 116	− . 095	4	18. 28

9118. 6^{m}4, 2$''$0, 115°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9121	BD+ 2° 4457	F5	8.9	8.77	21 56 37.361	+3.0439	−0.0028	+0.0005	+ 2 24 28.56	+17.210	+0.221	+0.002	4	17.99
9122	BD+38° 4653		*8.84*	8.8	56 39.212	2.5210	+ .0097	+ .003	+38 50 55.30	17.211	.181	+ .01	4	18.25
9123	BD+ 5° 4926		8.9		56 45.313	3.0014	− .0013	− .004	+ 5 56 39.38	17.216	.217	.00	4	18.21
9124	28 Aquarii	K0	5.75	5.7	56 59.426	3.0701	− .0038	+ .0001	+ 0 13 12.20	17.226	.222	− .006	4	19.03
9125	20 Pegasi	F2	5.66	5.96	57 11.431	2.9185	+ .0015	+ .0036	+12 44 10.27	17.236	.210	− .056	[illegible]	18.11
9126	BD−21° 6150	F8	10.4		21 57 12.321	+3.3362	− .0156	+ .0056	−21 6 52.01	+17.236	+ .241	+ .031	4	18.17
9127	BD+60° 2324	A2	*8.65*	9.1	57 15.24	1.8566	+ .0062	− .002	+60 43 1.08	17.238	.131	− .03	4	18.18
9128	BD+42° 4268		8.77	8.43	57 15.904	2.4437	+ .0104	+ .003	+42 41 5.71	17.239	.175	+ .02	4	18.28
9129	BD+18° 4908	A2	8.9	9.2	57 17.319	2.8359	+ .0039	.000	+19 9 14.37	17.240	.204	+ .01	[illegible]	17.57
9130	BD+70° 1208		*8.97*	9.1	57 18.39	1.1474	− .0214	+ .0050	+70 30 4.43	17.241	.078	− .004	[illegible]	17.54
9131	BD+55° 2665	K	*9.00*	9.1	21 57 38.956	+2.0777	+ .0098	.000	+55 38 59.11	+17.257	+ .147	.00	4	17.91
9132	Pi 21^{h} 361	G5	6.38	6.50	57 47.742	3.2972	− .0137	+ .0075	−18 17 16.52	17.262	.237	− .063	[illegible]	18.14
9133	CD−23° 17226		10.9	ft.	57 53.446	3.3609	− .0169	− .0048	−23 0 6.72	17.267	.241	.000	4	18.28
9134	BD+ 8° 4779	G0	*9.3*	9.2	57 55.134	2.9702	− .0002	+ .002	+ 8 35 14.88	17.268	.213	− .04	4	17.48
9135	BD+24° 4521	K2	9.3	8.3	58 1.361	2.7612	+ .0058	− .0003	+24 40 24.18	17.273	.196	− .048	4	18.06
9136	16 Cephei	F5	5.15	5.05	21 58 6.75	+0.8836	− .0382	− .0150	+72 47 56.31	+17.276	+ .058	− .160	8	19.37
9137	BD+84° 500		*9.15*	8.6	58 15.62	−3.8838	− .9340	− .0226	+84 26 31.67	17.283	− .294	+ .004	4	18.26
9138	BD− 3° 5363	G0	8.4	8.84	58 40.358	+3.1065	− .0051	− .0046	− 2 51 46.20	17.301	+ .221	− .103	4	18.02
9139	CD−29° 18145	K0	10.2		58 42.933	3.4551	− .0222	+ .0010	−29 32 29.99	17.303	.247	− .033	4	18.15
9140	BD+19° 4845		*8.91*	9.45	58 43.856	2.8251	+ .0043	.000	+20 9 8.96	17.304	.201	− .04	4	18.66
9141	BD+32° 4321		*9.50*		21 58 53.312	+2.6321	+ .0085	+ .002	+33 10 51.13	+17.311	+ .186	− .04	4	18.23
9142	BD+45° 3767		8.6	8.9	58 58.869	2.3850	+ .0111	− .002	+45 36 7.53	17.315	.168	+ .04	[illegible]	17.77
9143	BD−15° 6129	K0	8.1	7.98	59 2.762	3.2573	− .0118	− .0028	−15 20 18.79	17.317	.231	− .029	4	17.71
9144	ο Aquarii	B5	4.66	5.11	59 10.600	3.1026	− .0050	+ .0009	− 2 32 31.40	17.323	.219	− .011	4	19.26
9145	BD+11° 4719		*9.52*		59 28.843	2.9353	+ .0011	+ .002	+11 35 35.87	17.337	.207	− .03	4	18.26
9146	BD−13° 6085	A0	7.43	7.5	21 59 47.732	+3.2322	− .0106	.0000	−13 24 25.33	+17.351	+ .229	− .002	4	18.04
9147	BD+74° 947	A0	*8.75*	8.53	59 48.28	0.6289	− .0585	− .0015	+74 41 13.18	17.351	.039	− .006	4	17.81
9148	BD+57° 2443	K5	*8.65*	9.1	59 48.523	2.0257	+ .0095	+ .004	+57 25 5.14	17.351	.140	.00	4	18.29
9149	BD+50° 3534	A3	*8.77*	8.95	21 59 53.200	2.2613	+ .0114	+ .001	+50 30 21.09	17.355	.157	.00	4	18.49
9150	BD+26° 4343	G5	*9.82*		22 0 3.166	2.7346	+ .0065	.000	+26 50 47.19	17.361	.192	.00	[illegible]	18.47
9151	CD−27° 15757	B5	5.84	6.3	22 0 3.984	+3.4161	− .0202	− .0001	−27 12 36.87	+17.363	+ .242	− .018	4	18.28
9152	BD+43° 4120	A0	8.7	8.60	0 9.167	2.4221	+ .0110	− .0006	+44 16 9.24	17.367	.169	+ .014	4	18.25
9153	CD−25° 15731	F8	9.1		0 13.847	3.3910	− .0188	− .0021	−25 30 24.42	17.370	.239	− .075	5 4	17.79 18.51
9154	BD− 6° 5904		9.0		0 28.460	3.1480	− .0068	− .002	− 6 27 14.01	17.380	.221	+ .02	5 4	19.19 20.57
9155	Wi (1) 21^{h} 1323	K0	6.98	7.16	0 34.681	2.9572	+ .0005	− .0030	+ 9 51 8.76	17.385	.207	− .011	[illegible]	17.67
9156	Brad 2887	A3	5.23	5.69	22 0 40.556	+3.0877	− .0043	− .0011	− 1 17 37.56	+17.389	+ .217	− .042	4	18.68
9157	BD+82° 672	F0	*7.92*	7.69	0 42.22	−2.4257	− .5579	− .0028	+83 6 28.39	17.390	− .183	.000	4	18.32
9158	BD+ 7° 4791		9.9		0 56.496	+2.9856	− .0005	− .002	+ 7 28 45.51	17.401	+ .210	− .07	[illegible]	18.36
9159	BD+16° 4658		*8.64*	8.33	1 4.803	2.8690	+ .0033	− .001	+17 5 24.87	17.407	.200	− .01	[illegible]	18.50
9160	BD−19° 6217	A3	7.54	7.38	1 24.351	3.3011	− .0141	+ .0020	−19 3 27.95	17.421	.230	+ .007	[illegible]	18.25
9161	BD+ 4° 4798	F5	*8.37*	8.58	22 1 35.640	+3.0156	− .0015	− .0008	+ 4 57 48.61	+17.429	+ .210	− .033	[illegible]	17.56
9162	BD− 9° 5910	K0	9.8		1 37.946	3.1758	− .0081	.000	− 8 52 42.07	17.431	.221	+ .02	4	18.30
9163	ν Pegasi	K5	4.90	5.10	1 38.672	3.0188	− .0017	+ .0073	+ 4 40 1.04	17.432	.210	+ .092	4	19.05
9164	α Aquarii	G0	3.19	3.21	1 40.543	3.0809	− .0041	+ .0009	− 0 42 32.49	17.432	.215	− .006	93 86	19.27 19.43
9165	Brad 2895	A0	5.58	5.62	1 57.081	2.7142	+ .0073	+ .0024	+28 34 29.81	17.444	.187	− .017	5	18.08
9166	BD+73° 959		*9.55*		22 2 0.39	+0.7701	− .0481	− .0022	+74 3 6.21	+17.447	+ .048	+ .007	[illegible]	18.07
9167	ι Aquarii	B8	4.35	4.68	2 7.141	3.2308	− .0111	+ .0025	−14 15 29.95	17.452	.225	− .060	6	19.14
9168	BD−17° 6439	A2	9.3		2 13.236	3.2741	− .0127	+ .004	−17 2 28.93	17.456	.227	+ .02	4	18.30
9169	20 Cephei	K5	5.39	5.08	2 34.50	1.8198	+ .0058	+ .0016	+62 23 41.83	17.471	.121	+ .064	5	18.38
9170	BD+52° 3101	G5	*8.80*	9.1	2 36.325	2.2219	+ .0118	+ .008	+52 24 33.52	17.472	.151	+ .01	4	17.96
9171	BD−11° 5751	A5	9.6		22 2 36.776	+3.1976	− .0091	− .0016	−10 47 55.89	+17.473	+ .221	.000	4	18.17
9172	BD+41° 4381		9.0	8.9	2 44.554	2.4921	+ .0109	+ .001	+41 35 14.64	17.478	.170	.00	4	19.25
9173	Pi 21^{h} 393	G5	6.89	6.85	2 47.848	3.3454	− .0165	− .0003	−22 37 54.02	17.481	.232	+ .022	4	18.46
9174	BD+46° 3578		*9.49*	9.37	3 1.642	2.3742	+ .0118	− .001	+46 56 11.42	17.491	.162	− .01	4	18.08
9175	BD−21° 6166	K0	7.47	6.94	3 12.674	3.3249	− .0155	+ .0020	−21 8 58.80	17.498	.229	+ .002	4	17.98
9176	ι Pegasi	F5	3.96	3.96	22 3 17.077	+2.7695	+ .0062	+ .0220	+24 57 14.02	+17.501	+ .189	+ .018	4	18.71
9177	Wi (2) 21^{h} 1539	Ma	6.43	6.51	3 40.340	2.8665	+ .0036	+ .0025	+17 36 37.53	17.518	.196	− .031	4	17.98
9178	BD+34° 4601	A2	*8.62*	8.55	3 42.743	2.6141	+ .0095	+ .002	+35 13 56.64	17.519	.178	+ .01	4	17.53
9179	μ Pis Aus	A2	4.62		3 43.201	3.5002	− .0258	+ .0057	−33 22 45.93	17.520	.241	− .040	4	19.38
9180	υ Pis Aus	K9	5.09		3 45.241	3.5177	− .0269	+ .0012	−34 26 4.21	17.521	.242	− .053	4	19.21

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9181	BD+ 0° 4825		*9.78*		22 4 0.504	+3.0624	−0.0032	−0.0013	+ 0 54 27.40	+17.532	+0.209	0.000	4	18.07
9182	BD+ 3° 4665	K0	*8.59*	8.83	4 15.995	3.0261	− .0018	− .0015	+ 4 7 35.73	17.543	.206	− .004	4	18.33
9183	BD+11° 4735		9.1	9.2	4 33.650	2.9343	+ .0015	− .001	+12 6 32.96	17.556	.199	+ .01	4	18.22
9184	BD− 0° 4310	F5	8.65	8.33	4 34.324	3.0764	− .0038	+ .0014	− 0 19 50.21	17.556	.209	− .009	4	18.13
9185	BD+75° 811	K2	8.87	8.91	4 45.46	0.4520	− .0776	+ .0265	+76 11 36.11	17.564	.024	+ .055	4	17.74
9186	BD+14° 4742		*9.42*		22 5 7.991	+2.8976	+ .0028	.000	+15 15 5.09	+17.578	+ .195	− .02	4	18.25
9187	BD+53° 2791	K7	*8.60*	9.1	5 11.800	2.1800	+ .0120	− .003	+54 17 16.73	17.582	.145	− .01	4	18.06
9188	BD+71° 1107	K2	7.60	7.29	5 14.97	1.1175	− .0246	− .0021	+71 50 9.75	17.585	.071	+ .045	4	18.08
9189	BD+19° 4867		*9.44*		5 21.119	2.8377	+ .0046	+ .006	+20 8 5.06	17.589	.191	+ .02	4	18.16
9190	BD+36° 4769		9.2	9.5	5 25.591	2.5853	+ .0103	+ .004	+37 15 56.85	17.591	.173	+ .05	4	18.54
9191	Wi (2) 22h 46	G5	6.52	6.10	22 5 26.836	+2.4244	+ .0120	− .0041	+45 20 55.50	+17.593	+ .162	+ .034	4	18.25
9192	BD− 2° 5705	Ma	8.9	8.7	5 27.676	3.0997	− .0048	− .0006	− 2 24 49.12	17.593	.208	− .010	4	18.39
9193	CD−25° 15778	K2	10.2	ft.	5 39.634	3.3770	− .0187	+ .0034	−25 27 7.35	17.602	.228	− .026	5	17.97
9194	27 Pegasi	K0	5.65	6.00	5 40.778	2.6610	+ .0089	− .0045	+32 46 51.97	17.603	.178	− .072	4	18.66
9195	CD−28° 17627	K0	10.6	ft.	5 47.929	3.4217	− .0214	− .0003	−28 39 7.90	17.608	.232	− .012	4	18.58
9196	BD− 4° 5620	F8	9.00	8.7	22 5 49.090	+3.1233	− .0058	− .0019	− 4 31 45.20	+17.608	+ .211	− .046	4	18.01
9197	BD+47° 3711	G5	7.32	6.97	5 51.494	2.3606	+ .0124	+ .007	+48 7 30.49	17.610	.157	+ .07	4	18.49
9198	θ Pegasi	A2	3.70	3.74	6 9.826	3.0080	− .0009	+ .0184	+ 5 48 13.52	17.623	.201	+ .034	94 83	19.06 19.13
9199	BD+22° 4563	F5	7.28	7.01	6 17.600	2.8062	+ .0057	− .003	+22 43 57.59	17.628	.187	+ .02	4	17.78
9200	BD+23° 4476	K0	*8.74*	8.83	6 20.623	2.7873	+ .0062	− .0032	+24 10 24.54	17.630	.186	− .034	5 4	17.39 18.27
9201	Brad 2909	B5	5.40	6.19	22 6 20.959	+3.2074	− .0097	+ .0018	−11 57 32.08	+17.631	+ .215	+ .005	5 4	18.09 18.47
9202	π Pegasi	F5	4.38	4.45	6 25.912	2.6634	+ .0090	− .0010	+32 47 6.85	17.634	.177	− .023	4	18.49
9203	28 Pegasi	A2	6.40	6.56	6 43.214	2.8346	+ .0049	− .0021	+20 35 3.70	17.646	.188	− .013	4	19.05
9204	BD+13° 4862	A3	8.8	9.16	6 55.525	2.9201	+ .0022	− .002	+13 33 29.48	17.655	.194	+ .03	4	18.55
9205	BD− 6° 5925	K2	9.2		7 0.400	3.1424	− .0066	+ .001	− 6 17 16.58	17.658	.209	.00	4	18.12
9206	BD+17° 4707	A3	*8.14*	8.04	22 7 24.338	+2.8758	+ .0037	+ .003	+17 20 40.70	+17.674	+ .190	.00	4	17.78
9207	BD+61° 2263		*9.02*		7 33.08	1.8775	+ .0081	− .004	+62 13 2.90	17.681	.121	− .02	4	17.96
9208	BD+59° 2477	K5	*7.83*	8.36	7 33.335	1.9991	+ .0105	− .002	+59 36 28.93	17.681	.129	.00	4	17.53
9209	BD−14° 6228	F5	8.31	8.28	7 53.275	3.2365	− .0112	+ .0020	−14 37 14.05	17.694	.214	+ .020	4	17.76
9210	ζ Cephei	K0	3.62	3.6	8 4.557	2.0768	+ .0116	+ .0013	+57 48 23.45	17.703	.135	+ .007	4	18.13
9211	BD+ 2° 4476	F0	7.02	7.20	22 8 13.797	+3.0471	− .0025	+ .0009	+ 2 20 21.27	+17.708	+ .200	− .032	4	18.08
9212	BD+ 7° 4818	F8	*8.84*	7.97	8 14.452	2.9840	.0000	.000	+ 8 3 52.84	17.709	.196	+ .03	4	18.22
9213	24 Cephei	G5	4.99	5.42	8 16.42	1.1523	− .0229	+ .0061	+71 56 48.89	17.710	.071	+ .004	8	18.67
9214	BD+25° 4689	A0	*8.12*	8.10	8 17.513	2.7723	+ .0068	+ .0018	+25 38 18.97	17.711	.181	− .004	4	17.83
9215	BD+28° 4312	G5	*8.97*	8.7	8 26.176	2.7309	+ .0078	+ .0181	+28 40 6.25	17.717	.178	+ .114	4	18.04
9216	Lac 9058	A2	6.16	6.01	22 8 27.200	+3.3874	− .0197	− .0017	−26 43 22.96	+17.717	+ .224	− .035	4	18.03
9217	BD+38° 4703	F5	8.3	8.47	8 27.870	2.5730	+ .0110	.000	+38 38 36.79	17.718	.167	.00	4	18.30
9218	BD+49° 3764	G5	7.8	7.60	8 35.426	2.3406	+ .0130	+ .013	+49 32 31.87	17.723	.152	− .02	4	18.48
9219	BD+43° 4150		*8.92*	8.50	9 8.870	2.4823	+ .0123	− .001	+43 32 4.52	17.746	.161	+ .01	4	17.95
9220	CD−29° 18238	K0	9.1		9 16.030	3.4178	− .0217	+ .0005	−29 3 51.00	17.751	.224	− .020	4	17.75
9221	BD+ 8° 4820		9.3	9.1	22 9 39.106	+2.9748	+ .0005	− .002	+ 8 59 9.66	+17.766	+ .193	+ .03	4	18.03
9222	λ Pis Aus	B9	5.40	5.63	9 46.949	3.4037	− .0209	+ .0018	−28 9 50.52	17.772	.222	− .003	4	19.23
9223	BD+19° 4885		*8.82*	9.3	9 57.054	2.8504	+ .0048	− .001	+19 48 13.13	17.778	.184	.00	4	17.82
9224	BD+ 5° 4975	F8	8.17	7.97	10 1.653	3.0146	− .0010	− .0030	+ 5 22 46.33	17.781	.195	− .087	4	18.65
9225	BD+33° 4461		*8.85*	8.9	10 18.064	2.6588	+ .0098	.000	+33 55 12.37	17.792	.171	+ .05	4	18.01
9226	Lal 43363	G5	6.60	6.03	22 10 18.420	+3.2516	− .0121	+ .0004	−16 12 27.93	+17.792	+ .211	− .344	5	17.96
9227	BD+66° 1484	B9	*9.07*	8.77	10 20.67	1.6546	+ .0019	+ .0013	+66 32 44.37	17.794	.103	− .011	4	18.22
9228	BD+52° 3146	A5	7.60	7.15	10 22.292	2.2636	+ .0134	+ .002	+52 45 25.13	17.795	.144	+ .01	4	18.37
9229	BD+74° 956		*9.10*		10 26.08	0.8340	− .0467	+ .0010	+74 38 37.64	17.798	.048	− .054	4	17.98
9230	1 H Lacertae	K2	4.64	4.61	10 26.515	2.5692	+ .0114	+ .0042	+39 19 3.37	17.798	.165	+ .005	7	20.85
9231	BD+39° 4787	A0	*9.28*	8.9	22 10 33.963	+2.5556	+ .0116	.000	+40 5 58.65	+17.802	+ .164	+ .02	4	18.50
9232	BD−20° 6392	K0	8.9		10 41.348	3.2996	− .0148	+ .0025	−20 17 35.22	17.808	.212	− .009	4	18.00
9233	BD+60° 2362		*8.42*	9.2	10 44.42	1.9767	+ .0106	− .001	+60 46 24.55	17.810	.125	− .01	4	18.46
9234	Lal 43396	K0	7.06	6.90	10 44.460	3.0311	− .0017	− .0001	+ 3 53 3.74	17.810	.196	+ .008	4	18.54
9235	BD+30° 4655		*9.33*		10 56.870	2.7139	+ .0087	− .0005	+30 22 48.17	17.818	.174	+ .020	4	18.32
9236	Wi (2) 22h 186	K0	6.69	6.78	22 11 2.394	+2.8240	+ .0057	+ .0005	+22 7 33.26	+17.822	+ .180	− .003	4	18.51
9237	BD−10° 5873	G0	9.3		11 15.769	3.1860	− .0088	− .0059	−10 30 36.45	17.831	.205	− .115	4	18.03
9238	BD− 9° 5943	F8	8.5	8.6	11 20.902	3.1671	− .0078	+ .001	− 8 47 43.57	17.834	.204	.00	4	18.29
9239	Grmb 3725	A0	5.70	6.05	11 22.553	2.5127	+ .0123	+ .0049	+42 33 24.15	17.835	.160	− .022	4	17.94
9240	BD− 0° 4327	B8	8.6	8.7	11 47.994	3.0765	− .0036	+ .0004	− 0 21 40.61	17.852	.197	− .001	4	17.53

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9241	BD+34° 4638	A0	*8.41*	7.83	22 12 10.267	+2.6459	+0.0104	+0.002	+35 9 57.54	+17.867	+0.168	+0.02	4	18.31
9242	BD+79° 728	K2	*8.18*	7.71	12 15.50	−0.2453	− .1713	+ .0037	+79 39 38.05	17.871	− .024	− .009	4	18.29
9243	BD− 2° 5726	A2	6.09	6.23	12 26.381	+3.0938	− .0044	− .0020	− 1 59 43.00	17.878	+ .196	− .007	4	18.05
9244	θ Aquarii	K0	4.32	4.22	12 36.812	3.1595	− .0074	+ .0074	− 8 10 55.59	17.884	.200	− .019	82 74	19.05 19.37
9245	BD+ 1° 4599	K0	10.0	8.6	12 47.651	3.0563	− .0027	− .0013	+ 1 33 49.89	17.892	.193	− .005	4	18.49
9246	BD+31° 4668	K5	7.58	7.48	22 12 54.444	+2.6933	+ .0095	+ .002	+32 13 20.71	+17.896	+ .170	− .01	4	18.25
9247	BD+47° 3750		*8.88*	8.38	12 55.465	2.4054	+ .0136	− .005	+47 57 1.44	17.897	.150	.00	4	18.62
9248	Brad 2931	G5	5.80	5.75	12 55.969	3.1337	− .0062	− .0003	− 5 47 13.96	17.897	.199	+ .020	4	18.46
9249	BD+45° 3860		9.7		13 5.090	2.4577	+ .0133	+ .001	+45 39 31.74	17.903	.154	+ .03	4	18.41
9250	BD+50° 3637	K0	*7.72*	7.97	13 10.746	2.3393	+ .0140	.000	+50 41 11.70	17.907	.146	− .02	4	18.82
9251	BD−18° 6096	G5	8.1	8.37	22 13 11.038	+3.2744	− .0136	+ .0002	−18 33 43.02	+17.907	+ .208	+ .012	4	18.02
9252	BD+10° 4721		*9.55*		13 11.146	2.9582	+ .0014	− .005	+10 47 43.91	17.907	.186	− .03	4	17.84
9253	Wi (1) 22^{h} 196	G0	6.94	6.74	13 15.057	2.9397	+ .0021	+ .0578	+12 29 47.49	17.910	.185	+ .102	5	17.48
9254	BD+21° 4724	K2	*8.09*	7.70	13 33.041	2.8356	+ .0057	− .001	+21 36 41.16	17.922	.177	− .01	4	18.01
9255	BD+55° 2711	K5	*8.43*	8.9	13 35.770	2.1767	+ .0136	− .002	+56 15 53.02	17.923	.135	− .02	4	18.76
9256	BD+ 6° 4993		9.3	9.3	22 13 37.449	+3.0011	− .0003	− .004	+ 6 49 46.33	+17.924	+ .189	+ .02	3 4	17.40 18.26
9257	BD+67° 1422		*9.15*		13 39.75	1.5746	− .0009	− .0160	+68 14 21.12	17.926	.095	− .091	4	18.99
9258	BD− 4° 5648	A2	8.70		13 40.104	3.1214	− .0056	+ .0002	− 4 39 2.58	17.926	.196	− .007	4	18.02
9259	BD+14° 4768		*8.90*	8.99	13 44.648	2.9090	+ .0033	− .002	+15 19 17.13	17.929	.183	− .01	4	18.46
9260	BD+26° 4399	K5	6.80	6.76	14 5.119	2.7752	+ .0075	− .0014	+26 32 10.75	17.943	.173	− .017	4	18.24
9261	BD+18° 4970	K0	7.9	7.61	22 14 9.989	+2.8719	+ .0045	+ .003	+18 38 24.93	+17.946	+ .179	− .02	4	17.58
9262	CD−24° 17113	G0	8.1	7.84	15 0.692	3.3384	− .0175	.0000	−24 12 14.34	17.979	.207	.000	4	18.27
9263	BD+23° 4508	F0	9.4		15 16.485	2.8071	+ .0068	+ .0019	+24 14 59.40	17.988	.175	+ .020	4	18.50
9264	BD−12° 6240	F8	8.9	8.8	15 17.873	3.2014	− .0098	+ .0038	−12 19 5.71	17.990	.198	+ .009	4	18.55
9265	Pi 22^{h} 65 *br.*	F0	6.25	6.25	15 25.554	2.6231	+ .0114	+ .0058	+37 22 1.25	17.994	.161	+ .061	9	21.90
9266	Brad 2947	K5	5.99	5.83	22 15 35.91	+1.9480	+ .0110	+ .0065	+62 24 10.76	+18.001	+ .117	+ .023	4	18.31
9267	BD−22° 5888	G5	8.1	8.3	15 35.919	3.3153	− .0162	+ .0020	−22 25 11.88	18.001	.205	− .018	4	17.98
9268	CD−26° 16086	K0	10.2		15 39.214	3.3675	− .0194	− .0011	−26 38 37.66	18.003	.209	+ .027	4	18.31
9269	BD+42° 4354		8.6	8.40	15 57.306	2.5280	+ .0131	+ .002	+42 54 22.14	18.015	.154	+ .07	4	17.98
9270	ρ Aquarii	B8	5.36	5.7	15 59.408	3.1574	− .0074	+ .0006	− 8 13 23.80	18.016	.194	− .005	4	19.38
9271	BD+27° 4295	A0	*8.91*	9.3	22 16 6.400	+2.7630	+ .0083	− .0044	+27 53 18.12	+18.021	+ .169	+ .018	4	18.48
9272	BD−14° 6262	F8	9.1		16 31.522	3.2222	− .0109	+ .0040	−14 22 51.97	18.037	.197	− .004	4	18.04
9273	BD+ 7° 4851		9.3	9.3	16 51.282	2.9923	+ .0003	− .001	+ 7 52 20.77	18.049	.182	− .04	4	18.06
9274	BD+22° 4618	K0	7.9	7.76	16 56.208	2.8302	+ .0063	− .003	+22 39 30.29	18.052	.172	+ .02	4	18.55
9275	BD+29° 4639	K0	9.4		16 57.700	2.7432	+ .0089	− .0014	+29 34 16.05	18.053	.166	+ .006	4	18.30
9276	BD−19° 6265	K0	8.1	8.30	22 17 2.550	+3.2715	− .0137	+ .0027	−18 54 33.39	+18.056	+ .203	+ .031	4	18.67
9277	BD+69° 1241		*9.20*	9.2	17 5.75	1.5184	− .0034	− .0006	+69 32 5.20	18.058	.088	− .020	4	17.57
9278	Grmb 3746	B8	6.54	6.28	17 9.906	2.1964	+ .0146	+ .0025	+56 30 54.97	18.061	.131	+ .017	4	18.62
9279	47 Aquarii	K0	5.40	5.25	17 11.509	3.3069	− .0159	− .0014	−21 59 58.34	18.062	.202	− .087	4	16.87
9280	Wi (2) 22^{h} 326 *m.*	K0	7.65	7.65	17 23.348	2.7264	+ .0094	+ .0008	+30 54 26.10	18.069	.165	− .021	4	18.15
9281	BD− 8° 5858	Mb	8.7	8.45	22 17 29.750	+3.1541	− .0072	− .001	− 8 0 41.24	+18.073	+ .191	− .01	4	17.58
9282	γ Aquarii	A0	3.97	3.98	17 31.492	3.0908	− .0041	+ .0082	− 1 47 27.41	18.075	.188	+ .009	99 75	19.46 18.96
9283	31 Pegasi	B3	4.93	5.01	17 34.772	2.9520	+ .0020	+ .0003	+11 48 6.04	18.077	.178	+ .005	4	17.89
9284	BD+75° 821		*9.04*		17 45.15	0.7697	− .0558	+ .0043	+75 56 36.89	18.083	.041	+ .009	5	18.71
9285	BD+47° 3781	A0	7.7	7.30	17 52.598	2.4367	+ .0145	.000	+47 50 12.80	18.088	.145	− .01	4	18.08
9286	BD−16° 6070 *br.*	K0	8.7	8.58	22 18 12.108	+3.2401	− .0120	− .0004	−16 15 14.75	+18.100	+ .195	− .048	4	18.21
9287	CD−28° 17729	G0	9.7		18 21.301	3.3775	− .0205	+ .0003	−27 59 18.56	18.106	.203	− .052	6	17.77
9288	BD+53° 2858	F5	*8.25*	8.48	18 52.998	2.2948	+ .0153	+ .002	+53 44 8.17	18.126	.135	+ .01	4	18.11
9289	BD+44° 4113		8.9	8.75	19 5.466	2.5107	+ .0140	− .005	+44 37 11.35	18.133	.148	− .03	4	18.24
9290	BD−21° 6213	Ma	8.7	7.4	19 7.722	3.2881	− .0149	+ .0009	−20 43 5.06	18.135	.197	− .035	4	18.26
9291	BD+16° 4724	K2	7.47	7.23	22 19 36.059	+2.8967	+ .0044	− .002	+17 15 5.30	+18.152	+ .172	.00	4	17.78
9292	BD− 0° 4351	A0	*8.55*	8.45	19 37.797	3.0712	− .0030	.0000	+ 0 9 8.96	18.153	.183	− .007	4	18.04
9293	BD+34° 4670	F5	*8.8*	8.90	19 43.064	+2.6816	+ .0110	+ .004	+34 37 49.76	18.157	+ .158	− .01	4	18.48
9294	32 H Cephei	A0	5.38	5.57	19 52.37	−4.458	−1.406	+ .052	+85 42 22.02	18.162	− .283	+ .050	8	18.60
9295	BD+14° 4790	A0	6.73	6.94	20 6.412	+2.9228	+ .0035	.000	+14 52 34.89	18.171	+ .172	.00	4	18.28
9296	50 Aquarii	G5	5.92	6.10	22 20 10.058	+3.2126	− .0104	+ .0032	−13 56 7.05	+18.173	+ .190	+ .016	4	18.32
9297	BD− 2° 5751	F8	8.7	8.53	20 10.766	3.0910	− .0040	− .0002	− 1 51 14.65	18.174	.183	+ .070	4	18.31
9298	BD+38° 4754	Ma	*8.62*	8.8	20 24.119	2.6201	+ .0125	− .001	+38 48 54.56	18.182	.153	+ .01	4	17.79
9299	3 Lacertae	K0	4.58	4.91	20 24.659	2.3571	+ .0156	− .0016	+51 49 40.91	18.182	.137	− .190	4	18.27
9300	BD−10° 5907	K0	9.6		20 29.637	3.1719	− .0082	+ .0044	−10 0 25.19	18.185	.187	+ .004	5	17.95

9265. $8^{m}5$, 15″, 193°.

9280. $7^{m}7$-$10^{m}3$, 0″6, 220°.

9286. $9^{m}9$, 3″7, 91°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9301	BD+78° 788		*9.17*		22 20 41.35	+0.2493	−0.1161	−0.0078	+78 45 34.37	+18.192	+0.008	+0.009	4	18.94
9302	BD+ 3° 4702		*9.48*		20 57.096	3.0395	− .0015	+ .0010	+ 3 23 57.22	18.202	.179	− .024	4	18.52
9303	π Aquarii	B1	4.64	4.71	21 11.497	3.0632	− .0026	+ .0007	+ 0 58 15.45	18.211	.179	+ .003	4	17.94
9304	BD−12° 6264	F0	8.7	8.0	21 15.794	3.1945	− .0096	+ .0004	−12 18 52.85	18.214	.187	+ .004	4	17.62
9305	BD+32° 4418		*9.57*	9.1	21 44.677	2.7088	+ .0107	+ .004	+33 13 47.09	18.231	.157	.00	4	17.58
9306	Pi 22ʰ 91	A0	6.17	6.81	22 21 45.422	+3.3211	− .0173	+ .0001	−24 5 22.32	+18.232	+ [illegible]	+ .004	4	17.82
9307	Wi (2) 22ʰ 408	K0	6.40	6.71	21 48.956	2.8919	+ .0048	+ .0009	+18 2 13.26	18.234	.167	+ .027	4	17.26
9308	BD+12° 4820	F0	8.6	8.51	21 50.498	2.9471	+ .0026	− .003	+12 45 2.79	18.235	.171	.00	4	17.46
9309	Grmb 3767	Ma	6.87	6.33	21 51.111	2.3911	+ .0158	+ .0046	+50 50 55.78	18.235	.137	+ .027	4	18.07
9310	BD+35° 4796		*9.81*		22 5.508	2.6654	+ .0118	+ .003	+36 20 18.35	18.244	.153	+ .06	8	20.50
9311	BD+ 7° 4873	F5	8.0	7.47	22 22 19.412	+3.0000	+ .0004	.000	+ 7 29 49.55	+18.252	+ .173	− .02	4	17.52
9312	BD+20° 5153	G5	*9.15*		22 29.477	2.8645	+ .0060	− .002	+20 41 1.72	18.258	[illegible]	.00	[illegible]	17.91
9313	BD− 4° 5680	K0	9.3		23 0.256	3.1096	− .0048	+ .0029	− 3 50 44.83	18.277	.178	− .024	[illegible]	17.70
9314	BD+48° 3727		*8.48*	8.45	23 0.276	2.4410	+ .0157	− .004	+49 0 50.40	18.277	[illegible]	+ .05	4	17.79
9315	BD+62° 2079	Mb	7.18	7.5	23 6.08	2.0002	+ .0135	+ .0058	+62 55 16.10	18.280	.112	− .011	4	17.81
9316	BD+29° 4667	K5	8.51	8.25	22 23 25.953	+2.7530	+ .0098	+ .0022	+30 19 35.64	+18.292	+ .157	− .018	5	17.83
9317	BD−22° 5916	Mb	8.1	8.1	23 27.405	3.2966	− .0159	+ .0020	−22 16 40.23	18.293	.188	− .006	[illegible]	18.19
9318	BD+55° 2750	B8	6.42	6.61	23 57.184	2.2657	+ .0166	+ .001	+56 1 31.35	18.311	.127	− .01	4	17.79
9319	BD+41° 4504	F8	7.81	7.85	24 2.704	2.5903	+ .0139	− .003	+41 36 20.01	18.314	.145	− .02	4	18.18
9320	BD−16° 6088	K0	9.3	8.9	24 18.946	3.2289	− .0117	− .0005	−16 4 30.42	18.323	.183	− .054	4	18.30
9321	BD−14° 6288	G5	9.2		22 24 24.865	+3.2098	− .0105	+ .0047	−14 12 35.43	+18.327	+ .182	+ .002	4	18.32
9322	BD+64° 1665	G5	*7.80*	7.77	24 31.51	1.9100	+ .0118	− .0009	+65 3 29.84	18.331	.105	+ .010	4	18.26
9323	ζ² Aquarii *s. f.*	F2	4.42	4.71	24 42.843	3.0768	− .0032	+ .0138	− 0 25 48.64	18.338	.173	+ .045	4	19.07
9324	Brad 2962	K2	5.82	5.92	25 8.377	2.9903	+ .0012	+ .0037	+ 8 43 12.34	18.353	.167	− .028	[illegible]	17.82
9325	BD+50° 3730	B9	*8.13*	7.82	25 12.003	2.4118	+ .0166	.0000	+50 53 49.55	18.355	.134	− .014	4	18.48
9326	BD− 7° 5792	K0	8.7	8.62	22 25 13.915	+3.1430	− .0067	+ .001	− 7 27 45.26	+18.356	+ .176	+ .01	4	18.53
9327	Oelt 22181	F0	5.95	5.92	25 17.700	3.3523	− .0199	+ .0080	−27 31 0.77	18.358	.188	− .017	4	18.72
9328	Pi 22ʰ 120	K2	5.96	5.63	25 25.150	2.8072	+ .0085	+ .0018	+26 21 13.53	18.362	.157	− .018	[illegible]	18.52
9329	BD+14° 4806		*8.92*	8.76	25 29.150	2.9342	+ .0036	− .001	+14 30 5.11	18.365	.163	.00	4	18.35
9330	BD+ 4° 4860	K0	8.66	8.5	25 33.346	3.0237	− .0005	+ .0012	+ 5 13 54.77	18.367	.169	− .001	4	18.50
9331	BD+10° 4760		9.3		22 25 45.402	+2.9705	+ .0020	+ .003	+10 50 10.06	+18.374	+ .165	− .06	4	18.46
9332	BD+29° 4677	A3	7.84	7.70	25 50.700	2.7698	+ .0097	+ .0007	+29 34 45.24	18.377	.153	− .011	4	18.50
9333	δ Cephei	G0	Var.	4.41	26 11.803	2.2215	+ .0169	+ .0015	+58 0 19.42	18.390	.121	+ .003	4	18.26
9334	BD− 5° 5806	G5	7.9	8.0	26 17.751	3.1213	− .0054	+ .0065	− 5 13 41.36	18.393	.173	+ .048	4	18.30
9335	BD−18° 6135	K2	9.1	8.8	26 19.229	3.2470	− .0129	+ .002	−18 10 12.45	18.394	.180	− .01	4	18.48
9336	38 Pegasi	A0	5.51	5.63	22 26 22.041	+2.7389	+ .0108	+ .0025	+32 9 45.98	+18.395	+ .150	− .016	4	19.10
9337	σ Aquarii	A0	4.89	4.78	26 24.890	3.1767	− .0086	.0000	−11 5 15.96	18.397	.176	− .030	65 54	18.91 19.15
9338	BD+20° 5172	K0	*9.52*		26 27.732	2.8751	+ .0062	.000	+20 25 58.28	18.399	.158	− .01	4	18.50
9339	CD−26° 16177	K0	8.9		26 39.982	3.3396	− .0192	+ .0080	−26 45 46.13	18.406	.185	− .118	[illegible]	18.46
9340	BD+ 5° 5027		9.3		26 45.729	3.0163	− .0001	− .004	+ 6 5 26.57	18.409	.166	− .05	4	18.72
9341	BD+70° 1246		*9.00*	9.2	22 26 54.32	+1.5155	− .0033	+ .0344	+71 16 10.30	+18.414	+ .079	+ .068	4	18.55
9342	β Pis Aus *br.*	A0	4.40		26 57.717	3.4122	− .0245	+ .0046	−32 45 23.88	18.416	.190	− .018	4	18.21
9343	BD+27° 4332	F0	8.7	8.55	26 59.565	2.7953	+ .0091	+ .0019	+27 44 21.33	18.417	.153	− .015	5	18.11
9344	BD+42° 4419		8.8	8.97	27 0.121	2.5788	+ .0148	+ .001	+43 7 0.68	18.417	.140	+ .02	5 4	18.09 18.93
9345	BD−10° 5936	G0	8.7	8.9	27 3.950	3.1664	− .0080	− .0033	−10 4 33.28	18.420	.174	+ .006	4	18.24
9346	Wi (1) 22ʰ 494	K0	6.29	6.06	22 27 10.329	+3.1033	− .0045	− .0020	− 3 19 16.96	+18.423	+ .170	− .025	5 4	19.81 18.80
9347	BD+ 3° 4718	A0	*9.25*	8.63	27 11.290	3.0373	− .0010	+ .0035	+ 3 50 38.97	18.424	.166	− .046	5	19.20
9348	BD− 0° 4374	F5	9.0		27 16.661	3.0743	− .0029	+ .0026	− 0 10 40.72	18.427	.168	− .056	4	18.65
9349	Brad 2967	F0	6.39	6.71	27 26.897	3.1778	− .0087	+ .0041	−11 18 57.31	18.433	.174	− .041	4	19.36
9350	BD−22° 5931	F2	9.6		27 28.348	3.2889	− .0158	+ .0030	−22 23 7.90	18.434	.180	+ .007	4	18.83
9351	BD+37° 4600		*9.58*	9.5	22 27 43.939	+2.6680	+ .0130	+ .004	+37 42 5.63	+18.443	+ .144	+ .02	4	19.37
9352	BD+31° 4715		8.9		27 44.189	2.7518	+ .0107	+ .0013	+31 30 22.53	18.443	.149	− .013	[illegible]	18.95
9353	BD+56° 2797	B9	*8.90*	9.1	27 44.430	2.2663	+ .0176	+ .002	+57 0 31.98	18.443	.121	+ .03	4	18.42
9354	BD+46° 3728		8.8	9.2	27 46.763	2.5171	+ .0161	− .006	+46 42 43.62	18.444	.135	+ .04	4	19.38
9355	7 Lacertæ	A0	3.85	4.10	27 59.515	2.4533	+ .0170	+ .0145	+49 52 15.11	18.452	.132	+ .013	4	19.41
9356	BD+15° 4663		*9.8*		22 28 1.241	+2.9206	+ .0045	+ .003	+16 14 32.87	+18.452	+ .159	.00	[illegible]	19.54
9357	BD+23° 4558	F8	*8.53*	8.48	28 4.722	2.8464	+ .0075	+ .006	+23 27 9.45	18.454	.154	.00	[illegible]	19.07
9358	BD+ 0° 4890	F0	8.04	7.68	28 27.374	3.0621	− .0022	+ .0032	+ 1 10 18.12	18.467	.166	− .050	4	18.33
9359	CD−29° 18384	K2	8.2	7.4	28 31.640	3.3653	− .0214	+ .0017	−29 23 39.55	18.470	.183	+ .001	4	18.96
9360	BD+68° 1309		*8.90*		28 46.24	1.7380	+ .0071	+ .0029	+68 47 17.92	18.478	.090	+ .019	4	19.07

9323. $4\overset{m}{.}59$, $2\overset{''}{.}7$, 306°.

9333. $3\overset{m}{.}6$ to $4\overset{m}{.}3$.

9342. $7\overset{m}{.}84$, 30″, 172°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9361	BD−20° 6446	A0	8.83	8.1	22 28 47.340	+3.2592	−0.0140	+0.0010	−19 48 11.99	+18.479	+0.176	−0.001	4	18.74
9362	Grmb 3804	A3	5.80	5.95	28 54.002	2.6483	+ .0136	+ .0015	+39 22 4.61	18.482	.142	− .009	4	18.77
9363	BD+51° 3410 *n. pr.*	A2	*9.06*	9.1	29 5.731	2.4233	+ .0175	− .003	+51 30 54.43	18.489	.128	+ .02	4	18.28
9364	BD− 1° 4311	F5	8.6	8.6	29 6.406	3.0846	− .0034	− .0005	− 1 19 24.75	18.489	.166	− .028	4	18.49
9365	CD−26° 16203	F2	8.7		29 19.480	3.3248	− .0186	− .0020	−26 4 44.14	18.497	.179	− .005	4	18.73
9366	BD+66° 1520		*9.35*		22 29 34.14	+1.8641	+ .0116	+ .0015	+66 58 17.16	+18.505	+ .097	− .010	4	18.74
9367	CD−23° 17495	K0	8.1	8.4	29 46.029	3.2978	− .0168	− .0014	−23 42 21.26	18.512	.177	− .026	5	17.75
9368	BD+54° 2798	F2	*8.36*	8.48	29 57.039	2.3504	+ .0182	+ .002	+54 41 8.82	18.518	.123	.00	4	18.61
9369	BD+18° 5005		*8.76*	8.8	30 5.694	2.8943	+ .0059	.000	+19 15 1.05	18.523	.153	− .02	4	17.77
9370	υ Aquarii	F5	5.29	5.54	30 19.217	3.2696	− .0148	+ .0155	−21 7 6.25	18.530	.173	− .148	4	18.50
9371	226 B Cephei	A0	5.74	5.86	22 30 52.33	+1.0682	− .0352	− .0043	+75 48 50.51	+18.548	+ .051	− .001	8	18.64
9372	BD+34° 4719 *br.*		*9.43*		30 53.274	2.7141	+ .0125	+ .005	+35 17 45.43	18.549	.142	− .01	4	18.08
9373	BD+21° 4785	G0	*9.13*	9.2	31 7.770	2.8717	+ .0070	+ .001	+21 41 25.81	18.557	.150	+ .01	4	17.52
9374	BD+11° 4831	K0	*8.65*	8.12	31 9.766	2.9702	+ .0026	− .025	+11 28 30.01	18.558	.156	− .31	4	17.75
9375	η Aquarii	B8	4.13	4.27	31 14.754	3.0774	− .0030	+ .0060	− 0 31 48.89	18.561	.162	− .054	90 74	19.82 19.74
9376	BD+65° 1782 *m.*	K0	7.65	7.66	22 31 15.73	+1.9697	+ .0148	+ .0072	+65 25 4.08	+18.561	+ .101	+ .040	4	17.97
9377	BD+79° 743		*8.95*	9.19	31 28.56	0.2849	− .1261	− .0038	+79 45 49.11	18.568	.008	+ .013	4	18.53
9378	BD+57° 2562	K5	7.49	7.34	31 30.021	2.2750	+ .0188	− .003	+57 44 59.42	18.569	.117	+ .01	5	17.51
9379	Brad 2978	K5	6.81	5.97	31 30.521	3.2350	− .0126	− .0027	−17 52 25.23	18.569	.170	− .041	4	16.01
9380	BD+25° 4771	F8	*9.10*	9.31	31 31.646	2.8314	+ .0086	− .0009	+25 37 25.31	18.570	.147	+ .003	5 4	17.76 18.53
9381	BD+43° 4239	K5	7.83	7.92	22 32 9.074	+2.5845	+ .0160	− .001	+44 19 52.71	+18.591	+ .133	+ .03	4	17.75
9382	BD+31° 4733	K0	*8.74*	8.4	32 26.[illegible]	2.7598	+ .0113	+ .004	+32 7 51.15	18.600	.142	.00	4	17.72
9383	BD−13° 6225	G0	10.0		32 32.064	3.1857	− .0095	.0000	−12 47 44.53	18.603	.165	+ .072	4	17.95
9384	Grmb 3829	B3	6.20	6.5	32 33.733	2.4869	+ .0178	+ .0013	+49 39 22.41	18.604	.126	+ .009	4	17.85
9385	BD+39° 4892	B8	8.1	8.03	32 43.319	2.6607	+ .0144	+ .003	+39 40 26.98	18.609	.136	+ .01	4	17.77
9386	BD− 6° 6033	K2	9.8	9.1	22 33 1.848	+3.1229	− .0055	.000	− 5 47 32.97	+18.619	+ .161	+ .02	4	18.02
9387	BD+87° 206		*9.15*		33 28.18	−7.716	−3.658	+ .010	+87 23 9.14	18.631	− .428	− .019	4	19.01
9388	BD+45° 3998	K0	*9.00*	9.3	33 33.838	+2.5712	+ .0167	+ .004	+45 32 15.42	18.636	+ .130	.00	5 4	17.20 18.04
9389	κ Aquarii	K0	5.33	5.12	33 36.848	3.1126	− .0049	− .0052	− 4 38 27.70	18.638	.159	− .115	4	18.34
9390	BD+ 9° 5072	F8	9.3		33 42.789	2.9916	+ .0018	− .003	+ 9 22 39.99	18.641	.153	+ .02	4	18.24
9391	Wi (2) 22^h 692	A3	6.93	7.11	22 33 44.514	+2.8583	+ .0079	− .0014	+23 35 9.90	+18.642	+ .145	− .011	4	18.08
9392	31 Cephei	F0	5.22	5.02	33 47.47	1.4439	− .0074	+ .0394	+73 13 39.78	18.644	.070	+ .021	8	18.46
9393	BD+17° 4777		*9.82*		33 52.329	2.9130	+ .0056	.000	+18 2 13.49	18.646	.148	+ .01	4	18.60
9394	BD+50° 3768 *br.*	A0	*8.00*	8.28	33 56.566	2.4703	+ .0184	+ .0018	+50 52 13.21	18.649	.124	− .042	4	18.33
9395	BD+28° 4419	K5	*9.03*	8.8	34 2.351	2.8042	+ .0101	− .0002	+28 44 20.78	18.652	.142	+ .010	4	18.30
9396	BD+12° 4859	K0	9.3	9.4	22 34 2.425	+2.9601	+ .0034	+ .006	+12 57 28.44	+18.652	+ .150	+ .04	4	18.31
9397	Wi (1) 22^h 641 *m.*	G0	6.35	6.51	34 10.376	3.1441	− .0069	+ .0044	− 8 18 49.09	18.656	.160	− .002	4	18.36
9398	BD−21° 6266 *m.*	F0	9.2		34 11.776	3.2628	− .0148	+ .0011	−21 15 1.25	18.657	.166	− .015	4	18.95
9399	Lac 9197	A0	5.60		34 20.516	3.3956	− .0250	+ .0008	−33 29 52.96	18.661	.173	+ .038	4	19.47
9400	BD+ 2° 4536	K5	9.03	8.3	34 25.824	3.0478	− .0011	− .0021	+ 2 55 34.47	18.664	.155	+ .012	4	19.00
9401	CD−27° 16002	K2	10.4	ft.	22 34 45.046	+3.3267	− .0196	.0000	−27 36 24.49	+18.674	+ .168	− .072	4	18.73
9402	BD+83° 633		*9.93*	ft.	35 12.36	−1.2371	− .4488	+ .0208	+83 36 9.50	18.689	− .073	− .008	4	18.82
9403	BD−19° 6314	G0	9.13		35 20.822	+3.2439	− .0135	+ .0040	−19 32 29.76	18.693	+ .164	+ .012	4	18.35
9404	BD+33° 4556	F8	8.9	8.90	35 35.066	2.7546	+ .0123	− .001	+33 28 21.97	18.701	.138	.00	4	18.32
9405	10 Lacertæ	O5	4.91	5.00	35 40.070	2.6885	+ .0143	.0000	+38 38 0.85	18.703	.133	− .009	5	17.75
9406	30 Cephei	A2	5.21	5.46	22 35 48.52	+2.1239	+ .0190	− .0002	+63 10 6.18	+18.708	+ .103	− .019	5 4	19.53 19.44
9407	BD− 7° 5827	G0	7.13	6.90	36 2.160	3.1311	− .0061	− .002	− 6 57 4.11	18.715	.156	− .04	4	18.53
9408	BD−15° 6258	K0	8.5	7.96	36 5.213	3.2011	− .0106	− .0035	−15 1 16.39	18.717	.159	− .028	4	18.31
9409	BD−12° 6323	K5	8.5	8.04	36 6.998	3.1746	− .0089	− .0016	−12 1 21.06	18.717	.158	+ .002	4	18.22
9410	ε Pis Aus	B8	4.22		36 14.049	3.3209	− .0194	+ .0018	−27 27 40.17	18.721	.164	− .002	4	18.51
9411	BD+46° 3777	Mb	*8.14*	8.38	22 36 14.990	+2.5670	+ .0175	− .002	+46 38 33.44	+18.721	+ .126	+ .03	4	17.56
9412	BD+58° 2466	B	*9.00*		36 18.515	2.2912	+ .0203	− .001	+58 35 24.40	18.723	.112	− .02	4	18.45
9413	Pi 22^h 186 *m.*	G5	5.81	6.36	36 54.706	2.9534	+ .0041	+ .0185	+14 7 41.84	18.742	.145	+ .134	4	18.53
9414	BD+42° 4474	K5	8.0	7.76	37 12.378	2.6311	+ .0164	+ .006	+43 4 30.74	18.751	.127	+ .04	5	17.81
9415	BD+22° 4691	A2	8.00	8.35	37 22.986	2.8780	+ .0077	+ .002	+22 26 45.07	18.756	.140	.00	4	18.50
9416	BD+15° 4690	F8	8.6	8.6	22 37 25.458	+2.9402	+ .0049	− .001	+15 42 34.15	+18.758	+ .143	− .05	4	19.10
9417	ζ Pegasi	B8	3.61	3.60	37 28.271	2.9862	+ .0025	+ .0062	+10 24 48.25	18.759	.146	− .012	67 57	19.08 19.03
9418	BD−13° 6244	F8	9.1		37 30.998	3.1840	− .0098	+ .0065	−13 17 58.14	18.761	.155	− .030	4	18.72
9419	BD+25° 4780	F5	*9.37*		37 43.623	2.8419	+ .0094	− .0016	+26 10 42.23	18.767	.138	.000	4	18.33
9420	Lal 44403	K5	6.48	6.20	37 46.891	2.7958	+ .0112	+ .0054	+30 32 51.08	18.770	.135	+ .009	4	18.34

9363. 9^m4, 7″2, 132°.
9372. 11^m4, 2″2, 216°.

9376. 8^m3–8^m6, 0″3, 160°.
9394. 11^m0, 4″8, 286°.

9397. 7^m0–8^m8, 0″3, 108°.
9398. 9^m5–10^m7, 0″5, 327°.

9413. 6^m4–6^m7, 0″3, 60°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9421	BD+48° 3807		*9.45*		22 37 51.247	+2.5403	+0.0186	−0.004	+48 38 3.30	+18.771	+0.122	+0.04	4	18.30
9422	BD+ 6° 5049		10.5	ft.	37 54.713	3.0189	+ .0007	+ .001	+ 6 33 0.03	18.773	.146	+ .07	[illegible]	17.76
9423	BD+34° 4750		*9.50*		38 10.955	2.7420	+ .0134	− .001	+35 18 2.76	18.781	.132	− .01	4	18.53
9424	BD− 1° 4339 *m.*	F5	8.4	9.2	38 17.353	3.0826	− .0030	− .0018	− 1 12 37.83	18.785	.149	− .015	[illegible]	17.92
9425	BD+60° 2428		*9.10*	9.1	38 26.93	2.2295	+ .0208	+ .006	+61 5 47.83	18.790	.105	− .01	[illegible]	18.88
9426	BD−22° 5982	K0	7.28	6.92	22 38 41.147	+3.2610	− .0152	+ .0030	−22 4 36.56	+18.797	+ .157	+ .016	[illegible]	18.07
9427	BD− 5° 5846		9.8	9.4	38 43.914	3.1174	− .0052	.000	− 5 30 10.87	18.798	.150	− .01	4	19.02
9428	BD− 3° 5491	B9	8.3	8.04	38 49.783	3.0978	− .0040	+ .0006	− 3 6 6.28	18.801	.148	+ .003	[illegible]	18.55
9429	Wi (1) 22^{h} 760	K2	7.30	6.88	38 49.944	3.0358	− .0002	+ .0022	+ 4 32 57.52	18.801	.145	+ .022	4	18.58
9430	BD+68° 1325	A0	*8.87*	9.24	38 53.15	1.8691	+ .0139	+ .0060	+68 57 11.21	18.803	.086	− .042	[illegible]	18.07
9431	BD+23° 4595 *m.*	G5	*9.4*		22 39 0.095	+2.8728	+ .0083	− .005	+23 22 47.04	+18.806	+ .136	− .04	4	18.96
9432	BD+52° 3271	B9	*7.85*	8.05	39 1.067	2.4726	+ .0201	+ .007	+52 23 3.26	18.807	.117	+ .01	4	18.50
9433	BD+14° 4853	F8	8.2	7.89	39 4.913	2.9546	+ .0043	+ .002	+14 20 23.41	18.809	.140	+ .03	4	18.78
9434	CD−25° 16071	K0	9.10	8.3	39 5.478	3.2862	− .0172	− .0001	−24 48 0.20	18.809	.158	+ .015	4	19.29
9435	η Pegasi	G0	3.10	3.18	39 14.953	2.8086	+ .0111	+ .0008	+29 48 8.97	18.814	.133	− .035	14 13	21.28 21.16
9436	BD+80° 730		*8.60*	8.7	22 39 21.71	+0.3597	− .1275	− .0056	+80 21 56.34	+18.817	+ .010	.000	[illegible]	18.39
9437	CD−23° 17576	G0	9.1		39 41.946	3.2726	− .0162	+ .0016	−23 32 59.49	18.827	.156	+ .062	4	18.80
9438	BD−15° 6264	G5	7.60	7.10	40 1.936	3.1954	− .0105	+ .0005	−15 1 54.64	18.837	.151	− .018	4	18.70
9439	BD+74° 982		*8.16*	8.9	40 20.83	1.3720	− .0129	+ .0041	+75 1 1.85	18.847	.[illegible]	− .023	4	18.23
9440	BD+20° 5217	K0	7.73	7.81	40 23.363	2.9025	+ .0071	+ .002	+20 31 0.07	18.848	.135	+ .02	4	17.58
9441	13 Lacertæ	K0	5.24	5.4	22 40 31.160	+2.6723	+ .0162	− .0008	+41 23 56.52	+18.852	+ .126	+ .006	4	18.38
9442	BD− 7° 5847	F0	8.7	8.48	40 43.577	3.1309	− .0061	+ .003	− 7 19 25.12	18.858	.147	− .02	[illegible]	18.36
9443	BD+17° 4800	G0	*8.57*	8.61	40 59.415	2.9294	+ .0059	− .008	+17 36 34.46	18.866	.137	− .04	5	17.97
9444	BD+53° 2969	B9	*8.80*		41 17.070	2.4568	+ .0211	.000	+53 50 45.85	18.874	.112	.00	4	18.20
9445	BD−17° 6586	K0	8.8	8.7	41 17.644	3.2102	− .0117	+ .0020	−16 59 39.30	18.875	.150	+ .018	4	18.30
9446	BD+ 0° 4921	K0	7.44	7.21	22 41 18.367	+3.0622	− .0016	− .0071	+ 1 19 58.60	+18.875	+ .143	− .046	4	17.97
9447	BD+55° 2800	A0	8.11	8.31	41 20.950	2.4201	+ .0215	− .004	+55 26 12.36	18.876	.111	− .01	4	17.99
9448	Brad 3006	K0	6.45	6.6	41 34.534	2.9188	+ .0065	− .0024	+18 56 39.81	18.883	.135	+ .049	4	18.20
9449	BD+76° 872		*9.10*	8.8	41 46.45	1.1072	− .0360	+ .0090	+77 10 52.32	18.889	.046	+ .007	4	18.02
9450	BD+10° 4815	G5	7.48	7.39	41 54.708	2.9877	+ .0029	+ .001	+10 46 45.67	18.893	.138	.00	[illegible]	17.83
9451	BD+36° 4928	A5	*8.73*	8.3	22 42 16.930	+2.7404	+ .0144	− .002	+36 46 53.75	+18.904	+ .124	.00	4	17.97
9452	Wi (1) 22^{h} 821	F2	6.84	6.82	42 26.858	3.0170	+ .0012	+ .0031	+ 7 9 41.57	18.908	.138	+ .028	4	18.40
9453	BD+32° 4510		*9.77*		42 34.408	2.7862	+ .0127	+ .012	+32 53 55.91	18.912	.126	+ .03	4	18.18
9454	λ Pegasi	K0	4.14	3.97	42 40.523	2.8836	+ .0084	+ .0042	+23 8 39.58	18.915	.132	− .014	75 57	19.26 18.91
9455	BD−21° 6305	K0	8.7	8.54	43 7.434	3.2458	− .0145	+ .0016	−21 28 27.54	18.928	.148	− .064	4	18.22
9456	Brad 3007	G5	5.43	5.55	22 43 15.474	+3.2328	− .0136	− .0080	−20 1 51.36	+18.932	+ .147	− .208	4	18.46
9457	Wi (1) 22^{h} 839	K2	7.58	7.44	43 22.643	3.0896	− .0032	− .0007	− 2 12 38.27	18.935	.140	− .009	5	17.67
9458	BD+47° 3917		*8.89*	9.15	43 22.813	2.5876	+ .0195	.000	+47 53 10.62	18.935	.116	+ .03	[illegible]	18.23
9459	BD− 9° 6057	G5	10.0		43 25.475	3.1403	− .0067	− .001	− 8 46 22.25	18.937	.142	+ .01	4	18.08
9460	BD+44° 4232	A0	*8.42*	8.30	43 27.150	2.6444	+ .0180	− .003	+44 21 4.43	18.937	.119	+ .02	4	18.22
9461	Brad 3009	B9	5.70	5.55	22 43 27.998	+3.1858	− .0100	+ .0024	−14 28 42.31	+18.938	+ .143	− .013	[illegible]	18.24
9462	Lac 9256	G5	6.48	6.09	43 32.936	3.2892	− .0181	+ .0077	−26 19 54.76	18.940	.149	− .117	[illegible]	18.34
9463	BD+27° 4407	K0	*8.47*	8.57	43 36.483	2.8418	+ .0106	+ .0062	+27 50 15.27	18.942	.128	+ .038	4	18.18
9464	BD+59° 2568	A2	8.76	8.66	43 48.61	2.3115	+ .0230	.000	+60 11 21.69	18.948	.102	− .02	4	18.47
9465	BD+ 6° 5066		*9.63*		44 5.389	3.0233	+ .0010	+ .002	+ 6 29 22.47	18.956	.136	− .01	5	18.40
9466	BD+40° 4910	G0	8.7	8.70	22 44 8.211	+2.6997	+ .0164	+ .005	+40 39 31.95	+18.957	+ .1[illegible]	+ .06	4	18.56
9467	BD+57° 2612	A0	6.29	6.08	44 12.279	2.3766	+ .0230	+ .0015	+58 3 38.52	18.959	.105	+ .005	4	18.36
9468	BD+81° 790		*8.65*	9.22	44 13.88	0.1670	− .1696	− .0108	+81 30 32.89	18.959	.000	− .013	5	18.85
9469	BD+29° 4771	K5	8.16	8.08	44 16.318	2.8203	+ .0117	+ .0022	+30 12 11.93	18.961	.125	− .024	4	17.61
9470	BD+64° 1716		*9.02*	9.16	44 18.03	2.1666	+ .0225	+ .0029	+64 26 9.58	18.962	.094	− .001	4	18.70
9471	BD+12° 4891		*9.90*		22 44 40.555	+2.9710	+ .0041	− .001	+13 15 42.82	+18.972	+ .132	+ .01	4	18.32
9472	BD+ 9° 5108	K0	9.3	8.5	44 55.271	2.9970	+ .0026	− .001	+ 9 59 24.97	18.979	.133	+ .01	7 6	17.98 18.69
9473	τ Aquarii	K5	4.21	4.02	45 21.469	3.1794	− .0097	− .0011	−14 0 54.29	18.991	.141	− .036	4	18.42
9474	BD−11° 5933	K0	8.3	8.33	45 54.852	3.1539	− .0078	− .0010	−10 49 52.01	19.007	.138	− .018	4	18.03
9475	μ Pegasi	K0	3.67	3.92	46 8.409	2.8827	+ .0092	+ .0107	+24 10 43.81	19.013	.125	− .045	23 22	22.95 22.95
9476	BD+33° 4595		*9.15*	8.73	22 46 13.364	+2.7892	+ .0136	+ .002	+33 50 33.61	+19.015	+ .120	+ .02	4	18.54
9477	BD+12° 4894	G0	*9.26*	9.3	46 17.329	2.9800	+ .0039	.000	+12 22 59.52	19.017	.129	− .01	5 4	18.01 18.82
9478	BD+70° 1275	A0	*9.07*		46 18.57	1.8693	+ .0159	+ .0062	+70 39 43.52	19.018	.078	+ .002	4	18.52
9479	BD−13° 6283	K0	8.5	8.37	46 20.418	3.1711	− .0091	+ .0046	−13 6 53.14	19.018	.138	− .018	4	18.84
9480	CD−23° 17630	K2	8.7	8.43	46 20.658	3.2531	− .0157	+ .0008	−23 8 4.57	19.019	.142	− .006	4	19.18

9424. $9^{m}1$-$9^{m}1$, $0''.3$, 175°.

9431. $10^{m}1$-$10^{m}2$, $0''.5$, 128°; $11^{m}6$, 11″, 63°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9481	CD−29° 18481	A2	9.52		22 46 23.277	+3.3136	−0.0209	+0.0010	−29 43 44.10	+19.020	+0.145	−0.017	5	18.73
9482	BD+16° 4821		*9.79*		46 27.542	2.9455	+ .0059	− .001	+16 47 36.03	19.022	.127	+ .02	4	18.72
9483	BD+49° 3952	G5	8.0	7.80	46 28.915	2.5777	+ .0208	+ .016	+49 35 30.29	19.023	.110	+ .06	4	18.69
9484	CD−27° 16073	G0	9.4		46 30.852	3.2939	− .0192	+ .0007	−27 42 33.78	19.023	.144	− .012	4	18.75
9485	BD+61° 2350		*8.67*	8.96	46 33.02	2.2840	+ .0241	+ .002	+61 54 33.37	19.025	.097	− .06	5 4	18.82 18.62
9486	BD− 1° 4351	A2	7.32	7.5	22 46 36.031	+3.0801	− .0025	− .0003	− 1 0 7.24	+19.026	+ .133	− .006	4	18.10
9487	ι Cephei	K0	3.68	3.69	46 49.70	2.1403	+ .0231	− .0110	+65 46 46.22	19.032	.090	− .121	4	17.73
9488	BD+63° 1890	G5	*8.63*	9.1	46 56.65	2.2298	+ .0241	− .005	+63 34 44.86	19.036	.094	+ .04	4	18.07
9489	BD+34° 4776		*8.83*	8.40	47 23.906	2.7784	+ .0143	+ .001	+35 15 42.98	19.048	.118	+ .02	7	20.54
9490	BD+28° 4468	A0	*8.48*	8.53	47 27.995	2.8440	+ .0114	+ .0014	+28 48 34.85	19.050	.121	+ .012	4	18.26
9491	BD+43° 4321	A0	9.2		22 47 29.990	+2.6760	+ .0183	− .001	+43 39 38.21	+19.051	+ .114	.00	4	18.51
9492	BD+ 5° 5095	K5	8.76	8.5	47 30.204	3.0337	+ .0007	+ .0013	+ 5 21 30.05	19.051	.130	+ .010	4	18.12
9493	BD+ 1° 4657	F5	8.74	8.6	47 36.620	3.0629	− .0013	− .0042	+ 1 21 16.07	19.055	.131	− .025	4	18.18
9494	Wi (2) 22ʰ 1040 *m.*	A3	6.71	6.95	47 36.678	+2.8705	+ .0102	.0000	+25 57 59.33	19.054	+ .122	+ .003	4	18.10
9495	34 H Cephei *br.*	K0	4.98	4.90	47 50.13	−0.1714	− .2479	+ .0177	+82 43 45.82	19.060	− .016	+ .054	8	18.91
9496	BD+11° 4890		*9.78*		22 48 4.004	+2.9858	+ .0038	− .002	+11 54 43.35	+19.066	+ .126	− .01	4	19.05
9497	γ Pis Aus *br.*	A0	4.55		48 4.949	3.3437	− .0240	− .0024	−33 18 0.73	19.067	.143	− .032	6 5	18.83 18.68
9498	σ Pegasi	F5	5.30	5.3	48 20.682	3.0046	+ .0026	+ .0347	+ 9 24 34.91	19.073	.127	+ .043	4	18.54
9499	BD+15° 4719	K2	7.04	7.09	48 24.657	2.9592	+ .0051	+ .001	+15 27 28.07	19.075	.124	− .01	4	18.18
9500	BD+22° 4726	K5	*8.5*	7.83	48 25.263	2.9030	+ .0085	− .002	+22 27 29.71	19.075	.122	+ .01	4	18.75
9501	λ Aquarii	Ma	3.84	3.78	22 48 26.513	+3.1304	− .0061	+ .0003	− 8 0 20.30	+19.076	+ .132	+ .036	53 44	18.51 18.90
9502	BD+ 6° 5078	F2	*8.12*	7.80	48 32.663	3.0207	+ .0015	− .003	+ 7 14 1.41	19.079	.127	− .09	4	18.48
9503	CD−25° 16156	F8	7.6	8.02	48 45.828	3.2683	− .0174	− .0026	−25 34 23.58	19.085	.138	− .029	4	17.85
9504	BD− 6° 6088	K0	8.9	8.27	49 28.500	3.1191	− .0053	− .003	− 6 32 3.82	19.104	.130	+ .04	4	18.35
9505	BD+ 2° 4579 *m.*		*9.4*		49 49.038	3.0561	− .0007	+ .0022	+ 2 21 29.67	19.113	.127	+ .034	4	18.22
9506	Rad (45) 5878	F2	6.94	6.86	22 49 52.50	+2.0978	+ .0237	+ .0142	+67 33 47.89	+19.114	+ .084	+ .064	12	19.25
9507	BD+24° 4680	K7	*9.65*		49 57.789	2.8857	+ .0099	− .001	+24 57 1.61	19.116	.119	+ .02	4	18.32
9508	BD+53° 3017	A7	*9.03*	9.2	49 59.304	2.5290	+ .0232	− .003	+53 31 49.33	19.117	.103	.00	4	18.71
9509	BD+37° 4717	G5	Var.	8.3	49 59.365	2.7642	+ .0157	+ .006	+37 30 44.83	19.117	.113	+ .03	4	17.79
9510	BD− 5° 5881	K2	9.2	9.3	50 2.071	3.1069	− .0043	+ .0012	− 4 51 34.92	19.118	.128	+ .009	5	18.26
9511	BD−21° 6318	G0	9.6		22 50 10.628	+3.2288	− .0142	+ .0018	−21 16 30.79	+19.122	+ .133	− .029	4	18.96
9512	BD+21° 4850	K5	*8.5*	8.13	50 21.501	2.9113	+ .0085	.000	+21 58 32.50	19.127	.119	+ .03	4	18.71
9513	δ Aquarii	A2	3.51	3.34	50 24.419	3.1892	− .0108	− .0033	−16 14 47.78	19.128	.131	− .021	4	18.34
9514	Brad 3026	K0	5.66	5.49	50 31.659	3.1924	− .0111	− .0152	−16 41 47.18	19.131	.131	− .081	4	17.97
9515	BD− 8° 5976	A0	9.3		50 38.690	3.1318	− .0062	+ .006	− 8 26 9.74	19.134	.127	+ .01	4	18.70
9516	BD+18° 5067	Mb	7.90	7.11	22 51 5.893	+2.9354	+ .0072	− .002	+19 8 1.55	+19.146	+ .118	− .03	4	17.68
9517	BD+64° 1729	A0	*8.70*	8.89	51 12.83	2.2272	+ .0260	+ .0025	+64 57 12.85	19.149	.088	− .013	4	17.61
9518	Wi (2) 22ʰ 1121	F2	6.00	5.98	51 19.146	2.7792	+ .0155	+ .0071	+36 38 59.92	19.152	.111	+ .003	4	17.93
9519	BD+45° 4086	G5	8.8	9.5	51 36.568	2.6653	+ .0201	.000	+46 2 8.63	19.159	.106	+ .02	4	17.75
9520	BD−19° 6366	G5	9.6	8.4	51 51.833	3.2059	− .0124	+ .0082	−18 47 40.11	19.166	.128	+ .002	4	18.01
9521	BD+13° 5020	G5	*8.88*	8.8	22 52 13.034	+2.9793	+ .0047	− .003	+13 28 54.57	+19.175	+ .118	− .11	4	17.51
9522	BD+ 5° 5110	F8	9.01	8.8	52 16.972	3.0360	+ .0007	+ .0081	+ 5 23 33.61	19.177	.121	− .024	4	17.96
9523	BD+65° 1830		*8.92*	9.14	52 21.17	2.1999	+ .0262	+ .0067	+65 59 30.15	19.179	.083	− .021	4	18.29
9524	BD+53° 3032	K0	*8.10*	8.31	52 29.893	2.5422	+ .0240	+ .007	+53 49 32.79	19.182	.099	+ .04	4	18.10
9525	BD+ 7° 4948	G5	*9.70*		52 39.068	3.0189	+ .0021	− .001	+ 7 55 1.75	19.186	.120	− .05	5 4	17.31 17.99
9526	Oelt 24899	B9	7.06	7.1	22 52 49.822	+2.4998	+ .0252	+ .0008	+56 1 23.22	+19.190	+ .097	+ .007	4	17.63
9527	Lal 44876 *br.*	A3	6.55	6.54	52 51.416	2.9949	+ .0038	+ .0027	+11 25 14.85	19.191	.118	.000	4	17.88
9528	BD− 1° 4359	G0	8.6		52 52.806	3.0789	− .0023	+ .0036	− 0 55 31.32	19.192	.122	+ .012	5	17.61
9529	BD+25° 4848	K0	*8.55*	8.58	53 5.049	2.8854	+ .0106	− .0013	+25 57 38.13	19.197	.113	− .012	4	17.80
9530	BD+70° 1285		*8.86*	8.9	53 12.36	1.9901	+ .0226	+ .0026	+70 28 18.30	19.200	.075	− .018	4	18.27
9531	α Pis Aus	A3	1.29		22 53 14.147	+3.2947	− .0207	+ .0250	−30 2 48.29	+19.201	+ .129	− .166	39 38	23.28 23.29
9532	CD−23° 17682	G2	8.7	8.00	53 27.742	3.2354	− .0152	+ .0010	−23 2 19.54	19.206	.127	+ .007	4	18.19
9533	BD+31° 4816	K2	7.9	7.80	53 28.103	2.8358	+ .0134	− .0011	+31 46 17.17	19.206	.110	+ .008	4	18.01
9534	Lal 44887	K2	6.43	6.02	53 28.375	3.0501	.0000	+ .0045	+ 3 22 53.53	19.207	.120	+ .025	4	17.64
9535	Brad 3035	G0	5.59	5.38	53 31.959	2.9310	+ .0080	+ .0145	+20 20 22.66	19.208	.114	+ .051	4	17.90
9536	BD+38° 4903	K2	7.7	7.42	22 53 54.739	+2.7654	+ .0170	+ .0064	+38 57 38.92	+19.218	+ .106	− .004	4	18.04
9537	BD− 3° 5539	G5	6.21	6.52	54 8.308	3.0914	− .0032	− .0013	− 2 49 23.80	19.223	.122	− .003	4	18.30
9538	BD−11° 5963	K0	9.8		54 9.975	3.1442	− .0073	+ .0004	−10 41 38.59	19.224	.122	− .014	4	18.26
9539	BD− 5° 5897	K5	8.5	8.82	54 21.940	3.1053	− .0042	− .0006	− 4 55 49.88	19.229	.120	+ .001	4	18.26
9540	BD+34° 4808		*9.37*	9.1	54 47.405	2.8159	+ .0149	− .002	+34 23 28.92	19.239	.107	− .04	4	18.15

9494. $7^{m}4$–$7^{m}4$, $0''.2$, 187°.
9495. $10^{m}0$, $3''.5$, 34°.

9497. $8^{m}5$, $1''.3$, 267°.
9505. $10^{m}0$–$10^{m}4$, $1''.0$, 349°.

9527. $9^{m}2$, $3''.8$, 11°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9541	BD+15° 4737	G5	9.04	8.6	22 54 54.047	+2.9699	+0.0058	−0.0074	+15 21 11.13	+19.242	+0.113	−0.137	4	18.09
9542	BD+49° 4003	K5	7.57	7.30	55 4.748	+2.6233	+ .0230	+ .0006	+50 16 11.48	19.246	+ .099	− .024	4	17.80
9543	36 H Cephei	K5	4.96	4.72	55 5.90	−0.4318	− .3447	+ .0642	+83 55 5.78	19.247	− .026	+ .031	8	19.05
9544	52 Pegasi *m.*	F0	5.79	6.04	55 11.608	+2.9982	+ .0040	+ .0017	+11 18 3.53	19.249	+ .114	− .041	4	18.68
9545	BD+26° 4542	A2	*9.5*		55 18.591	2.8866	+ .0110	− .0013	+26 33 44.58	19.252	+ .109	+ .046	4	18.68
9546	BD−15° 6314	A3	9.01		22 55 20.485	+3.1701	− .0096	− .0035	−14 39 47.17	+19.253	+ .121	− .023	4	18.46
9547	BD−16° 6188	F8	8.3	8.56	55 21.775	3.1831	− .0108	+ .0046	−16 32 15.51	19.253	.122	− .024	4	18.17
9548	Grmb 3940	K2	6.41	6.18	55 42.121	2.5953	+ .0241	− .0045	+52 13 29.77	19.261	.096	+ .025	5	18.01
9549	CD−27° 16139	F8	8.5		55 48.478	3.2617	− .0182	+ .0016	−27 5 38.93	19.264	.123	.000	5	18.26
9550	BD+ 4° 4935	K0	7.02	6.9	55 55.719	3.0422	+ .0008	+ .0026	+ 4 43 49.43	19.267	.114	+ .012	4	17.90
9551	BD+29° 4830 *s. pr.*	A2	*8.51*	8.35	22 55 57.893	+2.8629	+ .0126	+ .0004	+29 38 53.65	+19.268	+ .107	+ .009	4	18.23
9552	BD−12° 6394	F8	10.5	ft.	56 2.160	3.1537	− .0082	+ .0009	−12 24 33.70	19.270	.119	− .025	4	18.30
9553	Brad 3039	K0	6.40	6.01	56 31.759	3.0743	− .0017	+ .0024	− 0 14 38.39	19.281	.114	+ .013	4	17.80
9554	BD+48° 3908	A3	7.8	8.07	57 3.695	2.6564	+ .0227	− .006	+48 57 42.78	19.294	.097	+ .01	6	18.41
9555	BD+39° 4987		*9.14*	8.80	57 7.382	2.7666	+ .0181	− .006	+40 12 41.39	19.296	.101	− .04	4	17.54
9556	BD+ 3° 4811		*9.32*		22 57 12.785	+3.0500	+ .0003	+ .0014	+ 3 35 16.72	+19.298	+ .112	− .008	4	17.81
9557	Brad 3040	K2	6.40	5.87	57 14.232	3.1202	− .0054	− .0017	− 7 29 27.40	19.298	.117	− .010	4	18.13
9558	BD+62° 2154		*8.92*	9.5	57 22.21	2.3622	+ .0292	− .005	+63 5 11.80	19.301	.085	− .02	4	18.53
9559	BD+18° 5089	G0	*8.48*	8.69	57 35.900	2.9501	+ .0075	+ .011	+18 50 27.21	19.307	.107	− .06	4	17.87
9560	BD+31° 4826	Mb	7.72	7.25	57 44.538	2.8471	+ .0141	− .0008	+32 10 58.56	19.310	.104	.000	4	17.90
9561	BD+58° 2527	A0	*9.33*		22 57 51.009	+2.4828	+ .0280	− .004	+58 44 59.51	+19.313	+ .089	+ .01	4	18.63
9562	BD−19° 6386	F8	8.9	8.4	57 51.723	3.1952	− .0121	− .0005	−18 53 50.70	19.313	.117	− .023	4	17.78
9563	CD−24° 17456	G5	9.7		58 7.475	3.2356	− .0161	+ .0064	−24 34 2.26	19.319	.118	− .070	4	18.56
9564	BD+ 0° 4957	F	*9.3*	8.9	58 12.804	3.0675	− .0011	− .0013	+ 0 50 29.41	19.321	.111	− .007	4	17.82
9565	o Andromedæ	*	3.63	3.70	58 14.152	2.7535	+ .0191	+ .0021	+41 53 45.01	19.322	.099	− .021	8	20.58
9566	BD+44° 4309 *br.*		8.6	8.5	22 58 27.772	+2.7253	+ .0205	+ .002	+44 25 25.10	+19.327	+ .097	+ .01	4	18.48
9567	Lal 45049	G5	6.19	5.79	58 28.096	3.2109	− .0138	− .0043	−21 17 54.56	19.327	.116	− .136	5	18.61
9568	BD+ 8° 4980	G0	8.7	8.67	58 28.598	3.0156	+ .0030	− .004	+ 9 9 9.27	19.327	.109	− .01	4	18.15
9569	BD− 8° 6005		10.2		58 35.673	3.1240	− .0058	+ .003	− 8 15 16.22	19.330	.112	− .02	5 3	18.27 20.18
9570	BD+22° 4763	F5	7.20	7.23	58 49.841	2.9253	+ .0096	+ .001	+22 42 1.44	19.335	.105	.00	4	18.03
9571	π Pis Aus	F0	5.13		22 59 4.476	+3.3202	− .0252	+ .0072	−35 10 55.86	+19.341	+ .119	+ .090	4	19.44
9572	Grmb 3968	K0	7.00	6.71	59 26.67	2.3904	+ .0302	+ .0025	+62 54 36.59	19.350	.083	+ .003	4	18.12
9573	BD+11° 4926	F5	8.2	8.42	59 45.138	3.0024	+ .0042	+ .003	+11 27 8.65	19.357	.106	.00	4	18.20
9574	CD−28° 18060	K5	8.3	7.9	59 46.602	3.2625	− .0192	+ .0005	−28 40 9.32	19.357	.116	− .027	4	18.78
9575	β Piscium	B5	4.58	5.00	59 48.324	3.0522	+ .0003	+ .0007	+ 3 23 20.50	19.358	.107	− .008	4	18.96
9576	β Pegasi	Ma	2.61	3.0	22 59 53.558	+2.8912	+ .0120	+ .0144	+27 38 54.72	+19.360	+ .101	+ .133	4	18.51
9577	BD+52° 3360	K0	7.65	7.4	22 59 57.092	2.6155	+ .0255	+ .0007	+52 52 16.73	19.361	.090	+ .007	4	18.12
9578	BD− 2° 5876	G0	9.1	9.24	23 0 11.306	3.0868	− .0026	+ .0035	− 2 19 54.06	19.366	.108	+ .020	4	18.27
9579	BD−12° 6413	K0	8.7	7.90	0 18.468	3.1497	− .0082	− .0010	−12 36 37.30	19.369	.110	− .025	4	18.82
9580	α Pegasi	A0	2.57	2.80	0 46.457	2.9826	+ .0059	+ .0040	+14 46 28.43	19.379	.102	− .045	100 87	20.35 20.54
9581	BD−10° 6052	F0	9.1		23 0 51.289	+3.1329	− .0067	+ .0003	−10 0 54.07	+19.381	+ .108	+ .024	4	17.93
9582	h^1 Aquarii *m.*	F0	5.56	5.68	0 59.519	3.1213	− .0057	+ .0082	− 8 7 32.79	19.384	.108	+ .017	4	18.42
9583	BD+79° 763		*8.67*	9.2	0 59.78	1.1713	− .0389	+ .0011	+79 51 14.44	19.385	.035	− .022	4	18.87
9584	BD+ 0° 4964	F8	8.49	8.7	1 22.139	3.0648	− .0006	+ .0015	+ 1 19 57.66	19.393	.106	− .091	4	18.49
9585	BD+25° 4870	K0	7.86	7.56	1 35.596	2.9115	+ .0112	+ .0031	+25 34 38.55	19.398	.099	− .007	4	18.00
9586	BD+31° 4839		*9.30*		23 1 37.460	+2.8597	+ .0146	+ .002	+32 18 57.78	+19.398	+ .097	− .01	4	18.06
9587	BD+57° 2689	B3	*8.32*	7.91	1 48.824	2.5395	+ .0289	− .002	+57 48 34.57	19.403	.085	+ .01	5	17.77
9588	BD−22° 6061	K0	8.9		1 58.425	3.2105	− .0144	+ .0014	−22 22 9.47	19.406	.109	+ .005	4	18.96
9589	BD−14° 6407	Ma	8.8	8.0	2 17.961	3.1569	− .0090	+ .0002	−14 11 4.00	19.413	.106	− .002	4	18.13
9590	BD− 4° 5822	F2	8.85	8.8	2 33.352	3.0996	− .0037	+ .0086	− 4 37 57.95	19.419	.104	− .034	5	18.77
9591	BD+68° 1353		*8.80*	9.14	23 2 41.83	+2.2183	+ .0323	− .0022	+68 50 38.93	+19.422	+ .072	− .010	4	18.04
9592	55 Pegasi	Ma	4.69	4.45	2 58.409	3.0207	+ .0032	+ .0005	+ 8 58 37.82	19.428	.100	− .014	5	17.83
9593	CD−26° 16484	F8	10.3		3 8.992	3.2373	− .0173	− .0020	−26 38 9.98	19.432	.108	− .027	4	18.74
9594	Wi (2) 22^{h} 1376	K0	6.54	6.51	3 16.731	2.8417	+ .0162	+ .0043	+35 12 12.59	19.434	.093	+ .017	8	20.73
9595	BD+41° 4682		9.0	9.1	3 24.317	2.7838	+ .0197	+ .007	+41 29 21.57	19.437	.091	+ .02	5	18.44
9596	Wi (2) 22^{h} 1377	K0	6.74		23 3 29.008	+2.9530	+ .0087	− .0011	+20 8 58.16	+19.439	+ .097	− .040	4	18.69
9597	BD+47° 4039		9.2		3 34.855	2.7165	+ .0232	− .001	+47 33 44.37	19.441	.088	− .04	4	18.09
9598	BD− 6° 6147	K0	8.9	8.28	3 42.072	3.1076	− .0044	+ .001	− 6 7 50.26	19.443	.102	+ .01	4	18.80
9599	BD+11° 4940	F0	7.8	7.44	3 47.874	3.0023	+ .0049	− .001	+12 14 25.19	19.445	.099	− .01	4	18.73
9600	Wi (2) 22^{h} 1387	B9	7.25	7.80	3 48.737	2.8883	+ .0134	− .0003	+29 37 17.93	19.446	.094	− .027	4	18.35

9541. 6^{m}0–7^{m}8, 0″.9, 238°.
9551. 9^{m}5, 1″.6, 30°.

9565. B5, A2 p
9566. 14^{m}, 5″.0, 166°.

9582. 6^{m}3–6^{m}3, 0″.2, 357°; 24 yrs.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9601	BD+54° 2915	G0	*8.52*	8.71	23 3 54.328	+2.6201	+0.0276	+0.0002	+54 25 4.70	+19.448	+0.084	−0.024	4	18.10
9602	Brad 3063	K5	5.56	5.52	3 59.498	2.7384	+ .0224	− .0005	+45 57 17.76	19.450	.088	− .030	4	18.55
9603	BD+18° 5109	K0	*9.32*	8.7	4 3.286	2.9646	+ .0079	.000	+18 30 43.31	19.451	.096	− .01	4	18.42
9604	5 Andromedæ	F0	5.83	5.85	4 7.024	2.7034	+ .0241	+ .0150	+48 51 35.47	19.452	.087	+ .126	4	19.26
9605	BD+16° 4874	G0	8.4	8.76	4 10.335	2.9778	+ .0069	− .006	+16 24 8.79	19.453	.097	.00	4	18.55
9606	BD+21° 4884	K0	*9.1*	8.96	23 4 19.670	+2.9449	+ .0094	− .003	+21 41 13.35	+19.457	+ .095	.00	4	18.40
9607	*A* Piscium	G5	5.56	5.21	4 35.012	3.0633	− .0004	+ .0091	+ 1 41 30.73	19.462	.099	+ .110	5 4	17.39 18.00
9608	BD+ 5° 5137		*9.76*		4 41.135	3.0398	+ .0018	+ .004	+ 5 53 27.88	19.464	.098	+ .05	4	18.39
9609	BD+10° 4887 *m.*	F5	7.51	7.69	4 46.309	3.0135	+ .0040	+ .002	+10 31 30.43	19.466	.097	.00	4	17.62
9610	c^{1} Aquarii	K0	3.80	3.61	5 11.019	3.1981	− .0136	+ .0033	−21 36 24.71	19.475	.103	+ .037	4	18.29
9611	π Cephei *m.*	G5	4.56	4.45	23 5 20.94	+1.8984	+ .0248	+ .0030	+74 57 17.49	+19.478	+ .057	− .025	8	18.60
9612	Lac 9383	K0	6.06	5.73	5 25.531	3.2440	− .0187	+ .0015	−28 31 21.52	19.480	.103	+ .010	4	18.12
9613	Brad 3068	Mb	5.41	5.25	5 29.104	3.0271	+ .0029	+ .0002	+ 8 14 36.34	19.481	.096	+ .002	5	18.45
9614	BD−16° 6224	A2	8.7	9.19	5 51.300	3.1661	− .0103	+ .0040	−16 37 19.52	19.488	.100	− .016	4	17.79
9615	BD−18° 6260	F8	8.9		6 2.109	3.1745	− .0113	.0000	−18 4 28.37	19.492	.100	− .038	4	18.57
9616	CD−24° 17522	K0	8.95	8.6	23 6 6.171	+3.2158	− .0158	+ .0005	−24 41 6.60	+19.493	+ .101	− .015	4	18.12
9617	BD+38° 4945	A0	6.51	6.67	6 6.206	2.8202	+ .0187	+ .0012	+39 2 7.10	19.493	.088	− .009	4	18.32
9618	BD− 8° 6040	G0	7.7	7.38	6 14.651	3.1177	− .0056	+ .0072	− 8 14 35.32	19.496	.097	− .156	5	18.15
9619	BD+62° 2179		*8.60*	7.91	6 16.30	2.4556	+ .0337	+ .0024	+63 17 48.16	19.497	.075	− .029	4	18.27
9620	BD+58° 2552	A3	5.63	5.68	6 18.396	2.5585	+ .0312	− .0005	+58 53 55.32	19.498	.078	+ .014	4	18.25
9621	BD+32° 4596	Mb	6.91	6.58	23 6 18.627	+2.8687	+ .0156	+ .001	+33 20 4.27	+19.498	+ .089	− .05	5	17.73
9622	BD+23° 4685	A2	*9.4*		6 35.509	2.9355	+ .0108	.000	+23 58 25.82	19.503	.091	+ .01	4	18.05
9623	BD+ 8° 5011	F8	*8.74*	8.42	6 37.884	3.0220	+ .0036	− .004	+ 9 20 45.50	19.504	.093	− .04	4	18.49
9624	BD+30° 4894		*8.84*	8.4	6 42.451	2.8896	+ .0143	+ .0009	+30 44 24.25	19.506	.089	+ .008	5	17.22
9625	Brad 3070	F5	5.85	5.80	6 45.162	2.7846	+ .0212	− .0183	+43 6 51.63	19.507	.085	− .188	4	18.54
9626	BD+28° 4542	G5	9.2	8.9	23 7 5.091	+2.9066	+ .0132	− .0014	+28 30 46.32	+19.513	+ .088	+ .031	4	17.86
9627	BD+ 4° 4975	Mb	6.86	6.95	7 10.088	3.0483	+ .0013	− .0002	+ 4 34 11.09	19.515	.093	+ .006	4	17.87
9628	BD− 0° 4476	F8	8.6	8.43	7 39.266	3.0738	− .0011	+ .0016	− 0 12 40.30	19.525	.094	− .008	4	17.79
9629	59 Pegasi	A3	5.15	5.45	7 41.782	3.0287	+ .0031	− .0011	+ 8 17 7.74	19.525	.092	− .006	8	18.23
9630	BD+66° 1590		*9.10*	9.1	8 8.64	2.3797	+ .0362	+ .0092	+66 36 25.24	19.534	.070	+ .010	4	18.31
9631	BD+73° 1018	A0	*8.65*	8.6	23 8 9.34	+2.0424	+ .0324	+ .0076	+73 46 47.92	+19.534	+ .058	− .001	4	18.34
9632	BD−10° 6082	K0	7.00	6.94	8 48.506	3.1249	− .0063	+ .0022	−10 0 19.78	19.547	.092	− .004	4	17.69
9633	BD+26° 4584	G0	*9.44*		9 0.858	2.9235	+ .0124	+ .0052	+26 50 4.44	19.551	.086	+ .030	4	18.20
9634	BD− 2° 5907		9.1	8.6	9 5.826	3.0856	− .0021	− .0041	− 2 29 51.14	19.553	.091	− .023	4	18.40
9635	BD+ 1° 4695	G5	*7.67*	7.62	9 18.737	3.0612	+ .0002	+ .0005	+ 2 14 22.07	19.557	.090	+ .026	4	18.40
9636	Brad 3077	K2	5.65	5.8	23 9 24.894	+2.6270	+ .0308	+ .2531	+56 43 34.30	+19.559	+ .075	+ .297	4	18.11
9637	BD+34° 4870		*8.59*	8.33	9 36.795	2.8662	+ .0171	− .004	+35 19 36.05	19.563	.083	− .03	7	20.47
9638	BD+14° 4952	G0	7.59	7.39	9 48.225	2.9953	+ .0065	.000	+14 56 1.08	19.566	.087	− .06	4	18.18
9639	BD+50° 3989		*8.76*		9 51.662	2.7133	+ .0270	.000	+51 5 51.37	19.567	.077	− .01	4	18.74
9640	BD−20° 6557	A2	7.50	7.33	9 53.439	3.1790	− .0124	+ .0052	−20 7 54.28	19.568	.092	− .022	5	18.35
9641	BD+ 9° 5183		*9.36*	8.9	23 10 2.019	+3.0216	+ .0041	− .008	+10 1 23.76	+19.571	+ .087	− .12	5	18.90
9642	φ Aquarii	Ma	4.40	4.26	10 10.794	3.1054	− .0043	+ .0018	− 6 28 49.57	19.573	.090	− .191	83 53	19.84 18.80
9643	BD+77° 894	F8	*8.70*	8.48	10 22.43	1.7637	+ .0194	− .0087	+77 37 44.82	19.577	.047	+ .013	4	18.12
9644	BD−22° 6093	K0	9.1		10 23.776	3.1888	− .0136	+ .0020	−22 1 56.26	19.577	.092	− .019	4	18.10
9645	290 Aquarii *br.*	K5	6.36	5.74	10 30.078	3.1290	− .0069	− .0006	−11 7 25.95	19.579	.089	− .012	4	17.71
9646	BD+48° 3972		9.2		23 10 34.230	+2.7477	+ .0254	+ .003	+48 39 30.35	+19.581	+ .077	+ .02	4	18.08
9647	BD+20° 5293	K0	8.80	8.73	10 45.836	2.9665	+ .0093	+ .014	+20 27 7.36	19.584	.084	− .04	4	18.40
9648	BD+40° 5026	Md	Var.		10 56.987	2.8315	+ .0201	+ .0009	+40 21 30.39	19.588	.080	− .004	4	18.60
9649	BD+71° 1190		*8.58*	8.35	10 57.80	2.2260	+ .0387	− .0034	+71 28 23.11	19.588	.061	− .005	4	18.63
9650	Pulk (55) 3405	A2	5.55	5.64	11 27.031	3.0920	− .0028	− .0012	− 3 55 57.72	19.597	.086	.000	4	18.72
9651	Lal 45531	K0	6.74	6.64	23 11 27.384	+2.9403	+ .0119	− .0002	+25 14 8.44	+19.597	+ .082	+ .022	5 4	18.18 18.79
9652	BD+12° 4958		*9.77*		11 29.779	3.0074	+ .0057	+ .002	+13 5 18.02	19.598	.082	+ .02	4	17.84
9653	BD+55° 2928	F8	*8.56*	8.78	11 34.090	2.6503	+ .0309	+ .006	+55 51 31.31	19.599	.073	+ .02	4	18.57
9654	BD+53° 3109	K5	*8.00*	8.08	11 37.958	2.6885	+ .0294	+ .002	+53 55 22.02	19.600	.074	.00	4	18.75
9655	ψ^{1} Aquarii	K0	4.46	4.63	11 42.040	3.1196	− .0059	+ .0248	− 9 31 25.89	19.602	.087	− .013	4	18.93
9656	BD+29° 4890	K0	8.06	7.65	23 12 22.408	+2.9120	+ .0145	+ .0273	+30 13 53.96	+19.614	+ .079	+ .092	4	19.13
9657	BD−16° 6250 *m.*	G0	8.5	8.5	12 27.163	3.1516	− .0096	+ .0017	−15 59 54.59	19.615	.086	+ .005	5	18.66
9658	CD−24° 17580	K2	9.0	8.5	12 50.704	3.1966	− .0151	+ .0022	−24 24 50.29	19.623	.087	− .001	4	19.05
9659	BD−14° 6437 *m.*	F8	8.3	8.38	12 56.671	3.1420	− .0088	− .0336	−14 15 39.52	19.624	.085	−1.206	4	18.34
9660	γ Piscium	K0	3.85	3.83	13 1.058	3.0592	+ .0008	+ .0502	+ 2 50 41.91	19.625	.082	+ .019	76 57	19.78 19.55

9609. $8^{m}1$–$8^{m}5$, 0″.3, 166°.
9611. $4^{m}7$–$7^{m}0$, 0″.5, 84°.

9645. $11^{m}5$, 3″.4, 253°.
9657. $8^{m}7$–$10^{m}1$, 0″.7, 330°.

9659. $9^{m}0$–$9^{m}2$, <0″.3.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9661	BD+78° 825	A0	7.74	8.00	23 13 19.65	+1.7082	+0.0163	+0.0007	+78 47 46.56	+19.631	+0.039	+0.003	5	19.94
9662	BD+46° 3995		9.2	8.9	13 23.185	2.7851	+ .0248	− .002	+46 49 13.34	19.632	.074	+ .01	4	18.79
9663	BD+17° 4891 *m.*	F0	6.71	6.68	13 38.438	2.9862	+ .0082	− .005	+17 52 6.36	19.636	.079	.00	5	18.95
9664	BD− 8° 6082	K2	8.3	8.30	13 38.703	3.1103	− .0049	.000	− 7 58 47.12	19.636	.083	.00	4	18.75
9665	BD+ 8° 5039	K0	7.67	7.74	13 57.236	3.0301	+ .0036	.000	+ 9 3 59.09	19.642	.080	+ .02	4	18.67
9666	BD+82° 713		*9.17*		23 13 57.82	+0.8979	− .0987	+ .0120	+83 0 36.32	+19.642	+ .018	+ .013	4	18.85
9667	BD+37° 4807		*9.57*		14 17.994	2.8635	+ .0195	+ .002	+38 19 6.84	19.648	.074	− .01	4	18.59
9668	BD+62° 2209		*8.06*	8.03	14 18.57	2.5632	+ .0372	− .005	+62 33 2.37	19.648	.066	+ .01	4	19.14
9669	BD+60° 2514		*8.60*	8.8	14 19.30	2.6009	+ .0357	− .001	+60 43 0.05	19.648	.067	− .01	5	19.19
9670	γ Sculptoris	K0	4.51		14 30.475	3.2436	− .0219	+ .0020	−32 58 5.02	19.652	.085	− .066	4	19.13
9671	CD−26° 16579	F2	9.5		23 14 33.596	+3.2049	− .0167	+ .0016	−26 39 43.54	+19.652	+ .084	− .015	4	17.84
9672	BD+40° 5043	A3	5.90	5.92	14 35.376	2.8413	+ .0213	− .0008	+41 20 11.43	19.653	.073	− .006	4	18.37
9673	BD− 0° 4500		10.3		14 38.534	3.0724	− .0007	+ .0024	+ 0 3 58.88	19.654	.079	− .017	4	19.34
9674	Cape (80) 12100	K5	6.75	6.61	14 46.393	3.2169	− .0183	+ .0004	−28 49 32.97	19.656	.084	+ .025	4	18.35
9675	ψ³ Aquarii *br.*	A0	5.16	5.24	14 48.041	3.1191	− .0060	+ .0032	−10 2 53.66	19.657	.080	+ .002	4	18.86
9676	BD+44° 4374		8.9	9.4	23 14 51.586	+2.8113	+ .0238	+ .001	+44 59 17.07	+19.658	+ .072	+ .04	4	18.75
9677	BD+15° 4801		*9.59*		15 1.532	3.0009	+ .0071	+ .002	+15 24 49.40	19.660	.077	+ .03	4	18.36
9678	Lal 45647	K0	6.08	5.92	15 11.619	3.1596	− .0110	− .0012	−18 30 48.30	19.663	.082	+ .004	4	18.54
9679	BD+10° 4914		9.1		15 14.772	3.0216	+ .0050	+ .002	+11 9 27.65	19.664	.077	.00	4	18.09
9680	o Cephei *br.*	G5	4.99	4.93	15 19.91	2.4425	+ .0418	+ .0111	+67 40 25.18	19.665	.061	+ .017	13	19.12
9681	BD+69° 1326		*8.80*	8.9	23 15 34.78	+2.3661	+ .0432	− .0037	+69 59 3.81	+19.670	+ .058	− .036	4	17.76
9682	BD+23° 4723	A0	*7.6*	7.01	15 43.902	2.9618	+ .0113	+ .001	+23 23 17.61	19.672	.075	− .01	4	17.51
9683	BD− 2° 5934		9.9		15 56.726	3.0818	− .0016	+ .0008	− 2 2 33.90	19.676	.077	− .027	4	18.54
9684	BD+33° 4689		*9.30*	9.3	15 57.887	2.9010	+ .0170	.000	+33 56 29.79	19.676	.072	.00	4	17.81
9685	Brad 3092	K0	5.18	5.17	16 15.970	3.0508	+ .0020	+ .0052	+ 4 56 40.34	19.681	.076	− .063	4	18.31
9686	BD+65° 1877	B9	*8.55*	8.56	23 16 20.06	+2.5049	+ .0411	+ .0016	+65 58 41.59	+19.682	+ .061	+ .008	4	18.47
9687	BD− 0° 4504	A3	*9.49*		16 29.728	3.0715	− .0005	− .0015	+ 0 16 51.73	19.685	.076	− .024	4	18.07
9688	BD− 9° 6171	A0	8.1	8.01	16 29.846	3.1143	− .0056	+ .003	− 9 21 28.66	19.685	.077	+ .02	4	18.09
9689	BD−20° 6580	K2	9.38		16 34.936	3.1627	− .0117	+ .0040	−19 40 27.45	19.687	.079	− .045	4	18.83
9690	τ Pegasi	A5	4.65	5.1	16 40.447	2.9645	+ .0114	+ .0020	+23 18 8.33	19.688	.073	− .021	4	18.32
9691	BD+52° 3422	K0	*8.40*	8.71	23 16 42.820	+2.7419	+ .0300	.000	+52 49 27.80	+19.689	+ .067	.00	4	18.04
9692	BD+13° 5096	K2	8.6	8.5	16 56.495	3.0110	+ .0064	.000	+13 52 35.01	19.692	.074	+ .01	4	17.64
9693	Brad 3099	F5	5.75	6.03	17 1.298	2.8798	+ .0194	+ .0097	+37 44 43.56	19.694	.070	− .078	4	18.00
9694	BD−14° 6453	K2	7.29	6.82	17 4.555	3.1334	− .0079	+ .0010	−13 42 28.22	19.695	.077	+ .026	5	17.85
9695	BD+ 6° 5145	G5	9.1		17 10.586	3.0442	+ .0028	.000	+ 6 32 43.42	19.696	.074	− .07	4	17.89
9696	BD−11° 6054	G0	8.8	8.5	23 17 34.354	+3.1219	− .0065	+ .0036	−11 17 57.65	+19.703	+ .075	− .050	4	17.78
9697	BD+76° 911	F2	8.0	7.23	17 59.82	2.0485	+ .0411	+ .0009	+76 37 27.23	19.709	.046	+ .013	4	18.34
9698	BD+51° 3592	K2	*8.90*	9.3	18 12.466	2.7659	+ .0295	+ .002	+51 41 36.27	19.713	.065	+ .02	4	17.98
9699	BD+ 2° 4657	K0	*8.87*	8.8	18 19.916	3.0593	+ .0012	− .0019	+ 3 10 2.75	19.715	.072	− .004	4	18.31
9700	BD+72° 1100		*9.48*		18 30.12	2.2942	+ .0469	− .0053	+72 49 23.25	19.717	.052	+ .038	5	18.41
9701	CD−24° 17620	F0	7.28	7.34	23 18 36.370	+3.1790	− .0144	+ .0092	−23 53 22.83	+19.719	+ .074	− .027	4	18.72
9702	BD+35° 5020	A	*8.77*	9.10	18 39.014	2.8982	+ .0186	+ .001	+36 2 15.76	19.720	.067	− .01	4	18.14
9703	BD− 5° 5978	F2	9.2		18 41.674	3.0957	− .0033	+ .003	− 5 28 32.04	19.720	.072	+ .01	4	18.52
9704	BD−22° 6114	F8	8.9		18 44.638	3.1692	− .0131	− .0037	−21 58 18.95	19.721	.074	− .040	4	17.59
9705	b¹ Aquarii	K0	4.20	4.3	18 46.288	3.1623	− .0122	− .0087	−20 32 15.18	19.722	.074	− .093	5	18.59
9706	BD+19° 5093	G0	6.58	6.7	23 18 47.662	+2.9852	+ .0098	+ .0226	+20 7 12.77	+19.722	+ .069	− .038	4	18.43
9707	Brad 3110	K5	5.93	5.86	18 57.993	2.6655	+ .0367	+ .0001	+59 41 40.61	19.725	.061	− .003	4	18.25
9708	BD+27° 4541	K0	*9.18*	9.2	19 1.155	2.9484	+ .0138	− .0009	+27 36 44.44	19.726	.067	− .019	4	17.94
9709	Brad 3108 *m.*	K0	5.28	5.12	19 2.393	3.0228	+ .0056	+ .0016	+11 52 30.46	19.726	.070	− .019	4	18.27
9710	BD− 4° 5879	K2	8.5	8.26	19 16.052	3.0878	− .0023	+ .0002	− 3 39 14.65	19.729	.072	− .002	5	18.45
9711	BD−15° 6411		9.7		23 19 27.382	+3.1353	− .0085	− .0001	−14 54 46.93	+19.732	+ .072	+ .045	4	18.80
9712	BD+40° 5063		*8.69*	9.1	19 54.485	2.8742	+ .0216	+ .003	+40 28 37.97	19.739	.065	+ .03	4	18.52
9713	BD+45° 4209		*9.22*		20 7.965	2.8336	+ .0254	− .003	+45 57 12.60	19.743	.063	− .02	4	18.50
9714	BD−18° 6299	Mc	Var.		20 12.792	3.1466	− .0103	− .0015	−17 45 31.37	19.744	.070	+ .012	4	18.37
9715	BD− 7° 6004	K0	8.9	9.3	20 18.947	3.1026	− .0043	+ .002	− 7 24 5.32	19.745	.069	+ .02	4	18.27
9716	BD+17° 4909		*9.86*		23 20 26.975	+2.9996	+ .0086	+ .007	+17 40 36.11	+19.748	+ .067	+ .03	4	18.20
9717	CD−28° 18186	F8	8.2	7.22	20 27.785	3.1936	− .0172	+ .0008	−27 47 28.72	19.748	.072	− .095	4	18.53
9718	BD+56° 2999	B5	6.76	6.9	20 29.251	2.7184	+ .0348	+ .0035	+57 5 46.20	19.748	.059	+ .001	4	18.13
9719	BD+64° 1800		*9.20*	9.4	20 48.28	2.5838	+ .0429	+ .0112	+65 3 16.11	19.753	.056	− .035	4	17.98
9720	67 Pegasi	A0	5.46	5.57	20 55.655	2.9313	+ .0164	+ .0004	+31 56 42.78	19.754	.065	− .001	4	17.91

9663. 6^m9–8^m8, 0″4, 217°. 9675. 11^m5, 1″0, 200°. 9680. 7^m6, 2″9, 204°. 9709. 5^m7–5^m7, 0″3, 320°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9721	4 Cassiopeiae	K5	5.20	5.23	23 21 16.53	+2.6528	+0.0399	+0.0017	+61 50 36.56	+19.760	+0.057	−0.008	4	18.54
9722	υ Pegasi	G0	4.57	4.38	21 23.030	2.9778	+ .0115	+ .0137	+22 57 48.74	19.761	.065	+ .028	85 48	20.20 20.25
9723	BD+31° 4905	K2	9.3	8.40	21 23.846	2.9326	+ .0165	+ .0007	+32 1 46.53	19.761	.064	− .008	4	18.30
9724	BD+57° 2736	A5	*8.77*		21 27.926	2.7151	+ .0360	.000	+57 58 42.93	19.762	.058	− .03	5	18.41
9725	BD+63° 1989	A0	*8.63*	9.19	21 33.16	2.6129	+ .0425	− .0011	+64 6 54.53	19.764	.056	− .021	4	18.52
9726	Brad 3113	K5	4.52	4.7	23 21 50.747	+3.1581	− .0124	− .0043	−21 4 50.45	+19.768	+ .068	− .058	4	19.04
9727	BD−20° 6592	F8	8.83	8.6	21 56.657	3.1523	− .0115	+ .0030	−19 48 48.25	19.769	.068	+ .008	4	18.10
9728	BD+ 3° 4860	A3	8.4	8.8	22 16.346	3.0578	+ .0017	− .0001	+ 3 53 58.35	19.774	.064	− .017	4	18.06
9729	BD+46° 4047	A0	8.0	8.40	22 47.322	2.8422	+ .0267	− .002	+46 51 37.82	19.782	.059	+ .02	4	18.52
9730	κ Piscium	A2	4.94	4.76	22 49.853	3.0696	+ .0003	+ .0057	+ 0 49 2.99	19.782	.064	− .090	54 38	19.17 18.77
9731	BD+24° 4776	A5	7.46	7.48	23 22 57.601	+2.9726	+ .0127	− .0004	+24 57 45.74	+19.784	+ .061	− .003	4	18.25
9732	BD+54° 2975	K5	*8.00*	8.80	23 8.582	2.7723	+ .0332	− .0003	+54 32 1.22	19.787	.056	+ .006	4	18.88
9733	BD+ 8° 5062		9.3	8.9	23 14.736	3.0378	+ .0046	− .004	+ 9 18 14.34	19.788	.063	+ .02	4	18.37
9734	BD+67° 1525	A5	*8.16*	8.12	23 23.71	2.5615	+ .0474	+ .0035	+67 25 35.07	19.790	.051	+ .004	4	18.54
9735	BD+29° 4930	K5	8.8	8.28	23 27.146	2.9529	+ .0153	− .0035	+29 27 4.74	19.791	.060	− .009	4	18.58
9736	BD+43° 4462	K5	8.0	8.44	23 23 28.988	+2.8720	+ .0242	+ .0004	+43 25 24.63	+19.791	+ .058	.000	5	18.40
9737	Lac 9485	K2	6.35		23 43.322	3.2257	− .0237	+ .0003	−35 59 6.72	19.795	.066	− .010	4	19.63
9738	BD+33° 4711	A5	*8.49*	8.25	23 45.366	2.9308	+ .0180	+ .0005	+33 59 31.94	19.795	.060	− .020	4	18.58
9739	BD+63° 1998	K0	7.40	7.39	23 51.65	2.6520	+ .0430	− .002	+63 29 19.70	19.796	.052	− .02	4	18.73
9740	θ Piscium	G5	4.45	4.29	23 54.527	3.0509	+ .0029	− .0088	+ 5 56 21.63	19.797	.061	− .043	4	19.19
9741	Wi (1) 23^h 402	G0	6.48	6.52	23 23 55.457	+3.1168	− .0065	+ .0057	−11 53 23.68	+19.797	+ .063	− .017	5	18.88
9742	BD+ 7° 5033	K2	7.9	7.82	24 0.881	3.0426	+ .0040	− .003	+ 8 11 27.28	19.799	.061	+ .01	4	19.52
9743	BD+80° 766	G5	*8.65*	8.8	24 3.52	1.7186	+ .0232	− .0110	+81 14 17.36	19.799	.031	− .011	4	19.21
9744	Lac 9489	A3	6.89	6.45	24 12.013	3.1735	− .0154	− .0008	−25 51 39.26	19.801	.064	− .005	5	18.67
9745	BD+ 5° 5176	K0	8.56	7.7	24 24.146	3.0533	+ .0026	+ .0013	+ 5 22 1.96	19.804	.060	− .031	4	18.59
9746	BD+35° 5034		*9.12*		23 24 25.619	+2.9207	+ .0195	.000	+36 20 22.48	+19.804	+ .057	− .04	4	18.80
9747	BD− 9° 6197	F5	8.5		24 25.718	3.1053	− .0049	+ .004	− 8 58 7.70	19.805	.061	.00	4	18.76
9748	BD+10° 4939	G5	8.6	8.51	24 43.009	3.0326	+ .0055	+ .002	+11 4 17.37	19.808	.059	+ .01	4	19.16
9749	BD+26° 4636	G0	*9.27*	8.81	24 44.101	2.9693	+ .0139	+ .0101	+26 48 2.19	19.808	.058	+ .038	4	18.56
9750	BD+47° 4169	F0	*8.27*	7.92	24 44.932	2.8437	+ .0282	.000	+48 12 12.52	19.809	.055	+ .03	4	18.80
9751	CD−23° 17919	F8	9.3		23 24 58.618	+3.1619	− .0139	− .0012	−23 41 4.75	+19.812	+ .062	− .025	5	18.69
9752	Wi (1) 23^h 434	A2	6.98	7.29	25 0.620	3.0161	+ .0079	+ .0005	+15 34 18.16	19.812	.058	− .009	4	19.54
9753	70 Pegasi	K0	4.67	4.3	25 6.416	3.0285	+ .0063	+ .0038	+12 19 8.45	19.813	.059	+ .027	4	19.03
9754	BD+31° 4919	A3	*8.52*	8.40	25 17.864	2.9457	+ .0170	+ .001	+32 13 30.54	19.817	.057	− .04	4	18.52
9755	Brad 3124	G0	7.10	6.7	25 24.164	3.0779	− .0008	− .0015	− 1 28 34.61	19.817	.059	− .017	4	18.46
9756	BD+22° 4845		*9.5*	9.5	23 25 34.382	+2.9878	+ .0118	+ .003	+23 0 13.37	+19.820	+ .057	− .07	4	18.36
9757	BD+58° 2599	K2	*8.45*	8.83	25 44.779	2.7420	+ .0387	− .004	+58 58 5.05	19.822	.052	.00	4	19.26
9758	BD+73° 1038	G0	*8.94*	9.2	25 44.86	2.3993	+ .0563	.0000	+73 32 24.08	19.822	.044	− .050	4 3	19.41 20.26
9759	BD−13° 6419	F0	8.5	8.59	25 48.392	3.1197	− .0073	+ .0024	−13 19 1.50	19.823	.059	− .010	4	18.84
9760	BD+44° 4430	A0	8.60	8.52	26 5.471	2.8754	+ .0258	.000	+45 2 47.17	19.826	.053	+ .04	5	18.47
9761	BD− 3° 5649		9.7	8.4	23 26 10.777	+3.0849	− .0018	− .0003	− 3 25 46.50	+19.827	+ .058	− .074	4	18.56
9762	1 H Cassiopeiae *br.*	B3	4.89	5.2	26 19.821	2.7583	+ .0378	+ .0031	+58 6 27.54	19.829	.050	+ .013	4	19.60
9763	BD+16° 4937		*9.27*		26 49.076	3.0134	+ .0088	.0000	+17 6 44.40	19.835	.055	− .032	4	17.78
9764	BD− 5° 6003	K0	8.1	7.84	26 50.230	3.0913	− .0030	− .001	− 5 30 6.65	19.836	.056	− .01	4	18.22
9765	BD+61° 2462	A0	*7.57*	7.91	27 10.40	2.7163	+ .0426	+ .002	+61 50 50.61	19.840	.048	+ .01	4	18.53
9766	BD−15° 6443	K0	8.5	8.7	23 27 17.672	+3.1241	− .0083	+ .0012	−15 8 14.25	+19.841	+ .057	− .036	4	18.31
9767	CD−25° 16494	G0	9.2		27 27.535	3.1609	− .0145	− .0018	−24 59 43.84	19.843	.057	+ .040	4	18.52
9768	BD+39° 5098		9.2	8.4	27 31.172	2.9156	+ .0222	+ .002	+39 46 13.94	19.844	.052	− .01	4 3	18.03 19.45
9769	Wi (2) 23^h 516	K0	*6.68*	6.00	27 31.752	2.9714	+ .0149	+ .0021	+28 13 29.84	19.844	.053	− .018	4	17.99
9770	BD+14° 5004		*9.55*		27 35.326	3.0235	+ .0076	+ .003	+14 37 50.90	19.845	.054	+ .01	4	18.58
9771	BD+ 0° 5012	F2	9.3	8.9	23 27 39.905	+3.0702	+ .0005	+ .0021	+ 0 46 46.36	+19.846	+ .055	− .004	4	18.54
9772	39 H Cephei	F0	5.62		27 44.65	−0.351	− .664	+ .098	+86 51 58.30	19.847	− .015	+ .018	127 93	18.96 19.01
9773	CD−27° 16345	K0	9.8		27 47.445	+3.1705	− .0164	+ .0007	−27 34 53.04	19.848	+ .057	.000	4	18.66
9774	Wi (1) 23^h 524 *m.*	F5	6.84	6.77	28 8.591	3.0511	+ .0033	− .0055	+ 6 38 39.90	19.852	.053	− .054	4	18.04
9775	BD+18° 5163		*9.67*		28 11.460	3.0081	+ .0100	− .002	+19 15 47.52	19.852	.053	+ .01	4	18.35
9776	BD+ 2° 4676	F5	9.0	8.9	23 28 23.196	+3.0644	+ .0014	− .0019	+ 2 35 55.43	+19.855	+ .053	− .010	4	17.56
9777	Grmb 4069	A0	7.08	7.20	28 35.84	2.2576	+ .0625	+ .0099	+77 22 39.78	19.857	.037	+ .015	8	19.23
9778	BD+41° 4809		9.2		28 40.093	2.9107	+ .0238	+ .002	+41 39 3.95	19.858	.050	− .01	4	18.60
9779	BD+49° 4146	K5	8.5	8.47	28 44.120	2.8558	+ .0305	+ .001	+50 2 56.19	19.859	.048	+ .02	4	17.19
9780	Grmb 4087	K0	7.02	7.16	28 47.437	2.8298	+ .0335	+ .0008	+53 14 40.90	19.860	.048	− .004	4	18.33

9762. 10$^{\mathrm{m}}$9, 1″2, 344°.

9774. 7$^{\mathrm{m}}$5–7$^{\mathrm{m}}$7, 0″2, 93°; 20 yrs.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9781	b^3 Aquarii	A0	4.76	4.7	23 29 5.561	+3.1430	−0.0120	−0.0005	−21 21 24.66	+19.863	+0.053	+0.017	4	19.65
9782	BD− 7° 6047		9.4		29 13.287	3.0953	− .0036	+ .001	− 7 12 0.89	19.865	.052	− .03	5	18.84
9783	BD−19° 6472	Ma	8.93	8.41	29 20.155	3.1361	− .0109	+ .0008	−19 35 14.66	19.866	.053	− .027	4	18.34
9784	Brad 3132	Mb	5.51	5.34	29 27.543	3.0008	+ .0116	− .0006	+22 3 26.08	19.867	.049	− .035	5	17.57
9785	72 Pegasi m.	K2	5.21	5.15	29 58.829	2.9683	+ .0167	+ .0040	+30 53 0.73	19.874	.048	− .012	4	18.01
9786	14 Piscium	A2	5.98	5.98	23 30 2.176	+3.0778	− .0006	+ .0071	− 1 41 22.01	+19.874	+ .050	− .009	4	19.16
9787	BD+ 7° 5055	F8	8.6	8.4	30 15.621	3.0476	+ .0044	+ .003	+ 8 16 16.40	19.877	.049	− .03	4	18.76
9788	BD+54° 3006	B3	7.41	7.50	30 21.998	2.8262	+ .0359	− .002	+55 2 48.66	19.879	.045	.00	4	18.49
9789	15 Andromedae	A0	5.50	5.83	30 42.432	2.9308	+ .0227	− .0011	+39 47 42.84	19.882	.046	− .040	4	19.42
9790	Wi (1) 23^h 568	A3	7.7	6.99	31 7.800	3.0363	+ .0065	− .0009	+12 13 14.74	19.886	.047	− .054	4	17.38
9791	BD−17° 6779	K0	7.66	7.26	23 31 18.369	+3.1238	− .0091	+ .0008	−17 1 31.46	+19.888	+ .049	− .024	4	17.80
9792	BD−11° 6110	K5	7.28	7.16	31 19.346	3.1051	− .0056	+ .0016	−10 59 50.70	19.888	.049	− .016	4	18.50
9793	248 G Aquarii	K0	6.51	6.40	31 24.486	3.0958	− .0039	− .0006	− 7 54 26.47	19.889	.047	+ .020	4	18.95
9794	Grmb 4099	K0	7.40	7.24	31 32.69	2.6819	+ .0526	+ .0052	+67 2 57.40	19.891	.040	+ .003	11	18.84
9795	BD+22° 4870	K7	*9.17*	9.3	31 38.726	3.0042	+ .0121	− .001	+22 33 9.21	19.892	.046	.00	4	18.53
9796	BD− 9° 6220	F5	7.33	7.35	23 31 52.598	+3.0992	− .0046	.000	− 9 12 28.52	+19.894	+ .047	− .01	4	17.83
9797	BD− 1° 4459	F0	9.3		32 6.945	3.0748	− .0001	+ .0026	− 0 45 18.89	19.897	.046	− .018	4	18.32
9798	BD+31° 4939 br.		*9.36*	9.5	32 13.698	2.9718	+ .0176	+ .0033	+31 59 46.33	19.898	.043	− .009	4	18.36
9799	Brad 3139	F5	5.65	6.1	32 18.310	3.0680	+ .0011	− .0075	+ 1 39 29.50	19.899	.045	+ .058	4	18.52
9800	BD+25° 4975	A2	*8.65*	8.08	32 27.249	2.9952	+ .0139	+ .0003	+25 49 30.35	19.900	.044	− .005	4	19.04
9801	BD+10° 4963	A5	7.82	7.87	23 32 54.436	+3.0433	+ .0058	+ .002	+10 34 19.08	+19.905	+ .044	.00	4	18.51
9802	BD+20° 5357	K0	*7.78*	7.73	32 55.227	3.0114	+ .0115	− .001	+21 16 49.95	19.905	.044	+ .01	4	18.35
9803	BD+51° 3666	A0	*8.05*	7.88	33 4.676	2.8734	+ .0333	− .0016	+51 50 32.49	19.907	.040	− .024	5	18.41
9804	BD+34° 4966	K5	*8.17*	7.97	33 5.150	2.9616	+ .0199	− .0010	+35 21 23.85	19.907	.043	.000	4	18.79
9805	BD+37° 4872	K2	*8.23*	8.30	33 6.484	2.9492	+ .0219	− .002	+38 17 44.06	19.907	.042	.00	4	19.04
9806	BD+ 6° 5176		*9.54*	9.2	23 33 10.200	+3.0545	+ .0038	− .001	+ 6 40 13.88	+19.908	+ .044	+ .01	5	18.63
9807	BD+18° 5180		*9.03*	8.85	33 25.504	3.0185	+ .0105	+ .001	+19 20 17.83	19.910	.042	+ .02	4	18.65
9808	BD−21° 6452	G0	9.4		33 28.970	3.1318	− .0114	+ .0028	−20 56 53.29	19.911	.044	− .034	4	19.37
9809	BD−13° 6440	K0	9.7		33 32.570	3.1075	− .0064	+ .0026	−12 38 39.86	19.912	.044	+ .022	4	19.35
9810	Grmb 4105 m.	B9	5.86	6.02	33 37.073	2.9246	+ .0263	+ .0007	+43 59 11.35	19.912	.040	− .012	5	18.87
9811	λ Andromedae	K0	4.00	3.72	23 33 38.541	+2.9138	+ .0280	+ .0149	+46 1 29.21	+19.913	+ .040	− .421	4	18.97
9812	BD+82° 727		*9.40*		33 39.40	1.7657	+ .0391	+ .1068	+83 18 43.96	19.913	.021	+ .025	4	21.03
9813	CD−23° 17773	G5	11.0	ft.	33 39.754	3.1405	− .0134	− .0020	−23 51 24.21	19.913	.044	− .036	4 5	19.32 20.37
9814	CD−25° 16553	F2	7.74	7.79	33 39.982	3.1452	− .0143	− .0013	−25 19 12.61	19.913	.044	− .070	4	18.96
9815	BD+ 2° 4690	F5	*7.64*	7.35	33 43.539	3.0649	+ .0019	+ .0019	+ 2 55 40.55	19.914	.044	− .020	4	19.10
9816	CD−29° 18779	K2	8.4		23 33 51.128	+3.1577	− .0172	+ .0006	−29 12 11.49	+19.915	+ .044	− .016	4	19.62
9817	Pi 23^h 137	K0	6.66	6.35	33 53.616	3.1149	− .0081	+ .0057	−15 32 8.04	19.915	.043	− .108	4	19.39
9818	BD+70° 1329	F5	*8.57*	8.59	34 2.21	2.6430	+ .0613	+ .0046	+70 37 48.90	19.917	.035	− .002	4	19.16
9819	BD+57° 2766 m.	F0	*8.55*	8.6	34 5.610	2.8347	+ .0401	− .003	+57 39 9.23	19.917	.038	.00	4	18.72
9820	ι Andromedae	B8	4.28	4.56	34 12.431	2.9336	+ .0255	+ .0024	+42 49 30.48	19.918	.039	− .003	7	20.88
9821	BD+26° 4668	A2	*8.58*	8.65	23 34 37.744	+2.9973	+ .0150	+ .0020	+27 8 0.36	+19.922	+ .039	+ .025	4	18.02
9822	BD− 2° 6005		10.1		34 50.767	3.0792	− .0009	− .0014	− 2 32 36.31	19.925	.041	− .027	4 5	19.29 20.22
9823	BD+16° 4959	K2	7.8	7.61	34 57.594	3.0294	+ .0091	− .002	+16 34 16.48	19.926	.040	+ .01	4	18.35
9824	Brad 3146	B9	5.32	5.32	35 15.299	2.9009	+ .0319	− .0013	+50 1 43.11	19.928	.037	− .009	4	18.88
9825	BD− 5° 6029	K2	9.1	8.5	35 36.966	3.0854	− .0022	+ .0011	− 5 6 32.00	19.932	.040	− .015	4	17.89
9826	ι Piscium	F8	4.28	4.24	23 35 50.066	+3.0599	+ .0031	+ .0248	+ 5 11 33.30	+19.934	+ .039	− .439	91 67	19.61 20.03
9827	Grmb 4120	G5	6.08	6.07	35 51.32	2.5965	+ .0701	+ .0043	+73 33 33.74	19.934	.031	− .003	8	19.00
9828	γ Cephei	K0	3.42	3.47	36 3.05	2.4599	+ .0793	− .0181	+77 11 8.37	19.936	.029	+ .158	8	18.70
9829	BD+48° 4120	F8	9.2		36 7.112	2.9113	+ .0314	+ .007	+49 16 27.05	19.936	.036	− .08	4	18.25
9830	BD+10° 4977		*9.57*		36 12.688	3.0458	+ .0062	+ .001	+11 0 32.55	19.937	.037	.00	4	18.71
9831	BD+59° 2756	G0	*9.05*		23 36 16.369	+2.8354	+ .0438	− .002	+59 48 29.09	+19.938	+ .035	.00	4	18.58
9832	μ Sculptoris	K0	5.33		36 26.491	3.1601	− .0196	− .0082	−32 30 55.74	19.939	.039	− .038	4	20.01
9833	κ Andromedae	A0	4.33	4.77	36 27.709	2.9409	+ .0267	+ .0073	+43 53 27.20	19.940	.035	− .024	4	18.28
9834	Wi (2) 23^h 734	F5	6.30	6.28	36 40.469	2.9731	+ .0210	+ .0203	+36 16 36.44	19.941	.036	+ .024	4	18.44
9835	Wi (1) 23^h 684	F8	7.08	6.76	36 41.018	3.0926	− .0039	+ .0043	− 8 21 24.62	19.942	.037	− .032	4	18.60
9836	BD− 7° 6070	F0	8.3	7.87	23 37 3.033	+3.0889	− .0031	− .001	− 6 55 15.64	+19.945	+ .037	− .02	4	18.12
9837	BD−19° 6493	F5	10.1		37 14.823	3.1183	− .0100	+ .0025	−18 59 3.91	19.946	.037	− .015	4	19.76
9838	BD−17° 6797	F5	9.1		37 25.362	3.1132	− .0088	+ .0020	−17 7 11.70	19.948	.036	+ .007	4	19.04
9839	BD+30° 5002	K0	*8.25*	8.68	37 28.853	2.9939	+ .0176	− .0033	+31 1 26.91	19.949	.034	− .041	4	18.31
9840	BD+74° 1034	K2	*7.34*	8.05	37 44.63	2.5844	+ .0771	− .0031	+75 8 24.19	19.951	.028	− .080	4	18.52

9785. $6^{m}0$–$6^{m}0$, 0″5, 193°.

9798. 13^{m}, 1″9, 352°.

9810. $6^{m}3$–$7^{m}0$, 0″5, 333°.

9819. $8^{m}7$–$10^{m}6$, 0″8, 40°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9841	BD+ 4° 5040		*9.22*	8.3	23 37 51.020	+3.0625	+0.0030	+0.0002	+ 4 31 18.43	+19.952	+0.034	−0.010	5	18.44
9842	BD+56° 3065	M0	*8.25*	8.7	37 53.215	2.8785	+ .0399	− .001	+56 27 33.81	19.952	.032	− .01	4	18.87
9843	BD+11° 5044	A3	8.5	8.47	37 56.559	3.0447	+ .0070	− .003	+12 18 1.35	19.952	.034	+ .02	4	17.91
9844	λ Piscium	A5	4.61	4.88	37 57.850	3.0697	+ .0013	− .0092	+ 1 20 23.00	19.953	.035	− .144	4	19.11
9845	BD+42° 4739		*9.17*	9.3	38 4.581	2.9547	+ .0261	+ .001	+42 45 2.20	19.954	.032	+ .05	5	18.38
9846	BD+37° 4881	A5	*8.65*	8.47	23 38 21.908	+2.9760	+ .0221	− .003	+37 30 16.58	+19.956	+ .032	.00	9	21.04
9847	BD+46° 4136	F8	*8.81*	8.30	38 29 807	2.9370	+ .0301	− .004	+47 18 42.31	19.957	.032	+ .02	4	18.22
9848	ω^{2} Aquarii br.	A0	4.62	4.73	38 34.481	3.1061	− .0075	+ .0060	−14 59 14.60	19.958	.034	− .060	6	17.80
9849	BD+67° 1558		*9.17*	8.9	39 1.75	2.7661	+ .0606	− .0061	+68 16 59.94	19.961	.028	− .055	4	18.37
9850	BD−13° 6454	G5	9.4	8.8	39 2.894	3.1001	− .0061	− .0107	−12 39 33.11	19.961	.033	− .160	4	18.30
9851	BD+14° 5040		*8.19*	8.64	23 39 5.648	+3.0412	+ .0083	− .002	+14 30 50.89	+19.962	+ .032	+ .01	4	18.50
9852	BD−21° 6467	K0	8.1	8.07	39 8.992	3.1206	− .0114	+ .0024	−21 32 2.45	19.962	.035	+ .015	5	18.98
9853	BD+52° 3502	A0	*8.72*		39 9.717	2.9123	+ .0360	− .001	+52 53 41.99	19.962	.030	.00	4	18.35
9854	BD− 0° 4560	A0	8.1	8.11	39 11.834	3.0740	+ .0004	− .0005	− 0 35 57.97	19.963	.032	− .026	4	18.67
9855	BD+22° 4893	K5	*9.16*	8.88	39 21.049	3.0225	+ .0127	− .0017	+22 39 30.35	19.964	.032	− .012	4	18.60
9856	BD+ 6° 5190	G5	9.1		23 39 30.908	+3.0578	+ .0045	+ .004	+ 7 6 34.90	+19.965	+ .031	− .01	4	18.83
9857	CD−27° 16423 s. f.	G0	10.4	ft.	39 56.987	3.1339	− .0155	+ .0022	−27 38 27.97	19.969	.031	− .006	5	19.59
9858	i^{1} Aquarii	B8	5.26	5.10	40 3.201	3.1121	− .0096	+ .0020	−18 43 15.70	19.969	.031	.000	4	18.08
9859	BD+61° 2510		*8.30*	[illegible]	40 12.28	2.8533	+ .0494	− .004	+62 17 7.82	19.970	.027	+ .02	4	18.70
9860	BD+17° 4973		*9.36*	9.2	40 24.665	3.0363	+ .0100	+ .001	+17 41 59.53	19.972	.029	+ .01	4	17.90
9861	BD+28° 4630	K0	8.6	8.50	23 40 32.105	+3.0090	+ .0168	− .0017	+29 19 36.66	+19.973	+ .029	+ .005	4	17.75
9862	BD+68° 1392		*9.27*		41 7.13	2.7828	+ .0646	+ .0041	+69 13 42.10	19.977	.025	+ .003	4	18.14
9863	BD+80° 781		*8.97*		41 32.13	2.4182	+ .1050	+ .0042	+80 40 18.46	19.980	.020	− .001	4	17.77
9864	BD+39° 5158		9.4	8.6	41 37.662	2.9846	+ .0240	+ .002	+39 28 1.01	19.981	.026	.00	4	18.12
9865	BD+ 0° 5042	F0	8.14	8.05	41 41.899	3.0704	+ .0015	− .0025	+ 1 13 41.61	19.981	.028	− .019	4	17.92
9866	BD− 6° 6282	G5	9.7		23 41 46.721	+3.0846	− .0025	+ .002	− 6 22 39.87	+19.982	+ .028	+ .04	4	18.79
9867	BD−11° 6135	F	8.5	8.99	41 52.181	3.0932	− .0050	+ .001	−10 58 9.17	19.982	.027	+ .01	4	18.29
9868	BD+32° 4704	A0	*8.60*	8.55	41 56.387	3.0054	+ .0191	+ .003	+32 36 51.82	19.983	.026	− .03	4	18.34
9869	ψ Andromedae	K0	5.09	5.50	42 3.821	2.9646	+ .0296	+ .0012	+45 58 34.44	19.984	.025	− .018	4	18.00
9870	BD+49° 4215	K0	7.62	7.50	42 6.809	2.9476	+ .0337	+ .004	+50 13 6.88	19.984	.025	.00	4	17.88
9871	19 Piscium	Na	5.30	5.32	23 42 18.196	+3.0672	+ .0024	− .0034	+ 3 2 34.80	+19.985	+ .024	− .020	4	18.92
9872	CD−24° 17844	F5	9.3	8.3	42 24.014	3.1190	− .0130	+ .0029	−24 18 30.94	19.986	.026	+ .058	5	18.43
9873	CD−29° 18837	K5	9.3	8.3	42 37.747	3.1293	− .0164	+ .0021	−29 13 51.38	19.988	.025	− .015	5	19.12
9874	BD+54° 3043	F5	*7.75*	7.88	42 39.551	2.9300	+ .0391	− .007	+54 42 29.98	19.988	.024	+ .01	4	18.21
9875	BD+25° 5002	K0	*9.35*		42 56.870	3.0255	+ .0146	+ .0028	+25 26 3.27	19.990	.024	− .002	4	18.78
9876	BD+21° 4981	A5	*9.57*		23 43 6.223	+3.0333	+ .0125	+ .001	+21 49 48.22	+19.991	+ .026	+ .02	4	18.30
9877	BD−15° 6497	F5	9.7	8.5	43 16.920	3.0988	− .0072	− .0020	−15 0 5.65	19.992	.025	− .056	4	18.58
9878	CD−26° 16784	G5	9.2		43 35.393	3.1206	− .0144	+ .0025	−26 37 50.69	19.994	.024	+ .010	5	18.83
9879	BD+45° 4325	K2	*8.10*	7.80	43 36.451	2.9753	+ .0294	− .002	+45 34 24.98	19.994	.023	.00	4	18.21
9880	Brad 3165	K0	5.60	5.4	43 49.754	3.0780	− .0007	+ .0063	− 3 12 23.03	19.995	.023	+ .006	4	18.22
9881	BD+13° 5172		*9.55*		23 44 3.664	+3.0495	+ .0083	+ .002	+14 2 5.49	+19.997	+ .023	− .04	4	18.27
9882	41 H Cephei	A0	5.02	5.22	44 4.46	2.8502	+ .0621	+ .0019	+67 21 44.25	19.997	.020	+ .002	12	18.93
9883	BD+ 5° 5221		*9.68*		44 9.792	3.0624	+ .0043	+ .002	+ 6 21 11.18	19.997	.023	+ .02	4	18.63
9884	BD+33° 4779		*8.67*	8.43	44 27.096	3.0122	+ .0202	+ .003	+33 45 26.84	19.999	.021	.00	7 6	20.48 21.42
9885	BD+24° 4837	G5	*9.42*	8.6	44 30.418	3.0313	+ .0143	+ .0009	+24 38 1.02	19.999	.021	− .006	4	18.53
9886	BD+60° 2620 br.		*8.55*	8.70	23 44 38.55	+ 2.9124	+ .0489	+ .003	+60 49 38.26	+20.000	+ .020	− .01	5	18.25
9887	BD− 5° 6056	K2	8.25	8.12	44 38.734	3.0803	− .0016	− .0005	− 4 52 48.77	20.000	.021	+ .014	5	17.81
9888	BD− 8° 6194	F2	9.4	8.8	44 39.010	3.0862	− .0036	+ .001	− 8 35 24.84	20.000	.021	.00	4	19.14
9889	δ Sculptoris br.	A0	4.64	5.05	44 45.711	3.1214	− .0157	+ .0080	−28 34 22.10	20.001	.021	− .101	4	18.52
9890	BD+18° 5223	G0	*8.86*	9.2	45 1.710	3.0430	+ .0110	− .007	+18 48 35.43	20.002	.020	− .01	4	18.63
9891	Lac 9605	F8	7.03	6.78	23 45 10.910	+3.1192	− .0155	− .0070	−28 17 52.75	+20.003	+ .021	− .065	4	18.13
9892	BD+50° 4161	A0	*8.75*	8.9	45 17.164	2.9684	+ .0348	+ .001	+50 33 47.02	20.004	.019	− .01	4	17.86
9893	Pi 23h 194	K0	7.14	6.79	45 17.737	3.1074	− .0114	− .0009	−22 3 32.12	20.004	.021	+ .002	4	18.79
9894	BD+23° 4813	F8	*8.46*	8.26	45 18.507	3.0356	+ .0136	− .009	+23 25 53.71	20.004	.020	− .08	4	18.92
9895	BD−16° 6373	K0	6.41	6.2	45 23.677	3.0976	− .0078	+ .0034	−16 18 19.83	20.005	.021	− .028	4	18.50
9896	BD+ 4° 5055	G0	*8.15*	7.98	23 45 28.542	+3.0661	+ .0033	+ .0022	+ 4 26 54.11	+20.005	+ .020	+ .007	4	19.04
9897	Brad 3171	A3	5.91	5.8	45 36.232	3.0274	+ .0167	+ .0054	+28 23 49.22	20.006	.019	+ .019	4	18.70
9898	BD+12° 5027		8.8	8.8	46 6.225	3.0542	+ .0078	− .001	+12 52 13.92	20.008	.019	.00	4	18.56
9899	268 G Aquarii	K0	6.08	5.66	46 7.071	3.0876	− .0044	+ .0086	−10 25 14.80	20.008	.020	+ .098	4	19.04
9900	BD−21° 6486	A2	7.25	7.02	46 26.076	3.1025	− .0104	+ .0032	−20 40 39.15	20.010	.018	− .009	5	17.41

9848. 11$^{\mathrm{m}}$0, 5$''$5, 84°. 9857. 10$^{\mathrm{m}}$1, 6$''$6, 344°. 9886. 11$^{\mathrm{m}}$3, 5$''$0, 212°. 9889. 11$^{\mathrm{m}}$6, 3$''$7, 234°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9901	BD+40° 5157		8.7	8.38	23 46 31.923	+3.0038	+0.0262	−0.003	+41 17 7.85	+20.011	+0.017	−0.03	4	17.80
9902	Grmb 4152	A0	6.76	6.99	47 3.89	2.9213	+ .0552	.0000	+63 32 24.20	20.013	.016	+ .004	4	17.84
9903	Brad 3173	Ma	6.11	6.02	47 16.182	3.0611	+ .0057	− .0017	+ 8 52 11.40	20.014	.016	− .058	4	18.34
9904	BD+26° 4707	K0	*8.27*	7.83	47 24.412	3.0355	+ .0159	− .0008	+26 53 29.85	20.015	.016	− .013	4	18.12
9905	BD+56° 3101	F0	*7.97*	7.80	47 39.960	2.9630	+ .0435	− .002	+56 45 41.79	20.016	.015	+ .06	4	18.00
9906	BD−19° 6524	K0	8.9	7.98	23 47 47.421	+3.0974	− .0094	+ .0035	−19 6 24.30	+20.017	+ .016	− .034	4	18.76
9907	BD+42° 4780	K0	6.91	6.55	47 49.380	3.0078	+ .0274	− .003	+42 27 54.16	20.017	.014	− .01	4	18.84
9908	Brad 3174	K2	5.85	5.45	47 52.048	3.0696	+ .0024	+ .0010	+ 2 29 8.40	20.017	.015	− .013	5	18.54
9909	BD+32° 4721		*8.95*	8.1	48 0.920	3.0271	+ .0201	− .001	+33 7 29.25	20.018	.015	− .01	4	18.34
9910	BD+48° 4176		*8.88*	8.6	48 10.529	2.9924	+ .0341	− .002	+49 21 38.25	20.019	.014	− .01	4	18.31
9911	BD− 4° 5971	F2	9.7		23 48 16.117	+3.0773	− .0008	+ .0004	− 3 50 30.55	+20.019	+ .014	− .012	4	17.67
9912	φ Pegasi	Ma	5.23	4.88	48 24.924	3.0499	+ .0112	− .0011	+18 40 33.60	20.019	.013	− .044	118 100	20.08 20.43
9913	BD+10° 5004	A3	5.39	5.21	48 32.194	3.0603	+ .0067	− .002	+10 30 8.03	20.020	.014	+ .01	4	17.83
9914	25 Piscium	A0	6.24	6.35	48 58.868	3.0709	+ .0019	+ .0008	+ 1 38 44.95	20.022	.013	− .006	4	19.12
9915	BD+79° 796	A5	*8.35*	8.26	49 1.87	2.7310	+ .1251	+ .0233	+79 23 22.99	20.022	.011	− .015	4	18.20
9916	BD+65° 1958	K2	*8.82*	8.56	23 49 16.94	+2.9327	+ .0621	+ .0049	+65 57 30.00	+20.023	+ .011	+ .007	4	18.22
9917	BD−12° 6584		9.7		49 45.035	3.0854	− .0051	− .0030	−12 0 56.08	20.025	.012	− .012	4	18.62
9918	BD+29° 5020	F0	8.01	8.30	49 49.572	3.0380	+ .0183	− .0054	+30 19 32.27	20.025	.011	− .021	4	17.79
9919	CD−23° 18082		10.7	ft.	50 2.103	3.0978	− .0118	+ .0007	−23 23 43.49	20.026	.011	− .010	3 5	21.16 19.44
9920	ρ Cassiopeiae	F8	4.85	4.75	50 22.658	2.9862	+ .0448	− .0006	+57 3 15.58	20.028	.010	+ .005	4	18.32
9921	BD− 2° 6059	K5	7.74	7.11	23 50 32.669	+3.0750	+ .0001	− .0005	− 2 23 28.27	+20.028	+ .010	− .010	5	18.32
9922	BD− 0° 4585	Mb	5.98	6.0	50 40.924	3.0730	+ .0011	− .0035	− 0 20 8.17	20.029	.009	− .008	4	17.85
9923	BD+36° 5130	F	*8.73*	8.50	50 44.754	3.0318	+ .0233	− .001	+37 8 57.45	20.029	.010	+ .01	4	18.51
9924	BD+ 6° 5215		*9.41*	9.3	50 50.962	3.0658	+ .0052	+ .004	+ 7 21 32.60	20.029	.009	+ .01	4	18.32
9925	Grmb 4163	B9	6.57	6.67	50 55.19	2.8885	+ .0928	− .0028	+73 57 53.96	20.029	.008	− .007	8	18.76
9926	BD+11° 5077		*9.57*		23 50 55.275	+3.0617	+ .0075	+ .008	+11 42 38.99	+20.029	+ .009	− .04	4	18.57
9927	BD+46° 4213 *br.*		8.6	9.4	51 19.221	3.0189	+ .0320	.000	+46 44 4.37	20.031	.008	+ .03	5	18.04
9928	BD+35° 5133		8.34	7.97	51 22.265	3.0368	+ .0222	− .004	+35 30 37.33	20.031	.009	− .03	4	18.54
9929	BD−14° 6577	G0	8.6	8.38	51 23.233	3.0854	− .0063	+ .013	−14 11 49.18	20.031	.009	− .07	5	18.05
9930	CD−24° 17911	F5	9.15	8.4	51 31.827	3.0954	− .0125	+ .0040	−24 40 31.85	20.032	.008	− .039	4	17.80
9931	BD+14° 5075	A0	*8.38*	8.29	23 51 59.346	+3.0607	+ .0090	+ .004	+14 23 46.67	+20.033	+ .007	+ .06	4	18.38
9932	BD+28° 4670	A0	*8.47*	8.67	52 11.926	3.0481	+ .0173	+ .0019	+28 25 52.89	20.034	.007	+ .014	4	18.11
9933	BD+16° 5019		*9.54*	9.2	52 24.573	3.0596	+ .0102	+ .003	+16 30 43.01	20.035	.006	+ .03	5	18.35
9934	BD+53° 3256	K2	*7.62*	7.46	52 31.153	3.0137	+ .0403	+ .002	+53 30 53.92	20.035	.006	.00	4	18.99
9935	Wi (2) 23^{h} 1027	Ma	6.30	6.04	52 36.727	3.0551	+ .0135	− .0014	+22 12 10.73	20.035	.005	− .003	5	18.21
9936	*V* Cephei	A0	Var.	6.89	23 52 40.04	+2.7369	+ .1848	+ .0296	+82 44 44.53	+20.035	+ .004	+ .009	8	18.61
9937	BD+51° 3744	A0	*8.37*	8.28	52 55.082	3.0204	+ .0380	+ .002	+51 43 4.50	20.036	.005	+ .01	4	18.78
9938	BD+44° 4528	F8	*8.48*	8.60	53 11.619	3.0337	+ .0301	+ .005	+44 28 35.92	20.036	.005	+ .01	4	18.49
9939	BD+ 2° 4737	F0	*8.26*	7.43	53 18.933	3.0710	+ .0026	− .0051	+ 2 33 54.75	20.037	.005	− .042	4	18.57
9940	CD−27° 16497	K0	9.8		53 27.379	3.0923	− .0140	.0000	−27 10 22.76	20.037	.005	− .018	6	20.61
9941	BD+19° 5176	G5	8.00	7.68	23 53 31.341	+3.0590	+ .0122	+ .001	+19 53 5.81	+20.037	+ .004	+ .01	5	17.62
9942	BD− 8° 6215	G5	8.1	8.5	53 39.972	3.0778	− .0026	− .004	− 7 49 13.56	20.038	.004	.00	4	19.04
9943	ψ Pegasi	Ma	4.75	4.78	53 40.697	3.0558	+ .0150	− .0031	+24 41 48.45	20.038	.004	− .037	4	19.41
9944	BD+ 4° 5073	K0	*9.03*	9.3	53 41.901	3.0695	+ .0041	− .0016	+ 4 57 33.30	20.038	.004	− .016	4	18.57
9945	BD−12° 6592	G5	7.9	7.66	54 10.152	3.0799	− .0048	− .0056	−11 54 10.51	20.039	.003	− .046	4	18.84
9946	Brad 3188	K2	6.40	5.89	23 54 14.349	+3.0825	− .0072	+ .0055	−16 17 34.27	+20.039	+ .002	− .009	4	19.34
9947	Lal 46981 *br.*	A3	6.80	7.05	54 16.262	3.0497	+ .0218	+ .0011	+34 34 3.20	20.039	.002	− .002	4	18.55
9948	BD+38° 5103	K2	7.79	7.73	54 18.321	3.0463	+ .0249	+ .0030	+38 31 7.29	20.039	.002	− .032	4	19.11
9949	27 Piscium *br.*	K0	5.07		54 34.622	3.0749	− .0006	− .0038	− 3 59 59.38	20.040	.002	− .067	4	18.98
9950	BD+76° 942	G0	*8.52*	8.03	54 39.46	2.9398	+ .1181	+ .0085	+76 49 3.52	20.040	.001	− .037	4	18.83
9951	BD−20° 6682	K0	8.1	7.96	23 54 44.659	+3.0839	− .0095	+ .0028	−20 5 51.83	+20.040	+ .001	+ .004	4	18.43
9952	BD+15° 4916		*8.86*	9.1	54 47.012	3.0643	+ .0097	− .001	+15 23 30.39	20.040	.001	.00	4	19.05
9953	BD+25° 5050	K0	*8.91*	8.73	54 49.279	3.0579	+ .0161	+ .0027	+26 10 58.17	20.040	.001	− .002	4	19.27
9954	CD−29° 18907	K0	9.5		54 55.314	3.0892	− .0153	+ .0020	−29 5 50.33	20.040	.001	− .021	4	19.05
9955	σ Cassiopeiae *br.*	B2	5.08	5.16	54 56.588	3.0301	+ .0436	+ .0013	+55 18 35.11	20.040	.001	− .005	4	19.05
9956	ω Piscium	F5	4.03	4.11	23 55 12.118	+3.0696	+ .0050	+ .0101	+ 6 25 13.44	+20.041	+ .000	− .109	92 76	20.34 20.38
9957	BD+67° 1583		8.4	8.66	55 21.37	3.0059	+ .0721	+ .0067	+67 56 19.18	20.041	.000	.000	4	18.81
9958	Pi 23^{h} 249	G5	6.77	6.72	55 34.409	3.0756	− .0017	+ .0023	− 6 20 14.02	20.041	.000	− .054	4	18.52
9959	BD+62° 2343	K2	*7.90*	7.56	55 40.38	3.0241	+ .0573	− .004	+62 32 47.25	20.042	.000	.00	4	19.39
9960	BD− 2° 6072	G5	8.2	8.49	55 42.727	3.0738	+ .0003	+ .0053	− 2 33 27.09	20.042	.000	− .034	4	19.38

9927. 15^{m}, $4\overset{''}{.}3$, 32°.
9936. $6\overset{m}{.}2$ to $7\overset{m}{.}0$.

9947. $9\overset{m}{.}5$, $3\overset{''}{.}5$, 22°.
9949. $10\overset{m}{.}8$, $1\overset{''}{.}6$, 274°.

9955. $7\overset{m}{.}2$, $3\overset{''}{.}0$, 327°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9961	BD+ 5° 5245	K0	7.66	7.55	23 55 48.315	+3.0703	+0.0045	+0.0008	+ 5 30 43.11	+20.042	−0.001	−0.051	4	19.11
9962	BD−18° 6409	K2	8.6	8.14	56 0.173	3.0805	− .0084	+ .0017	−18 27 29.43	20.042	.001	− .012	5	18.59
9963	BD+ 0° 5078	K0	*9.41*	8.7	56 0.599	3.0723	+ .0021	− .0024	+ 0 53 11.38	20.042	.001	+ .024	5	19.04
9964	BD+48° 4207		9.2	9.4	56 3.091	3.0466	+ .0349	+ .002	+48 35 52.00	20.043	.001	+ .03	5	20.36
9965	BD− 4° 6003	K2	8.5	7.74	56 25.847	3.0741	− .0004	+ .0005	− 3 45 7.85	20.043	.002	+ .018	4	18.58
9966	BD− 0° 4603	K0	8.1	7.84	23 56 32.978	+3.0728	+ .0015	+ .0018	− 0 13 20.63	+20.043	− .002	+ .013	4	19.13
9967	BD+34° 5046		8.8	8.58	56 50.926	3.0599	+ .0223	+ .002	+34 52 17.61	20.043	.003	− .01	4	18.97
9968	BD+40° 5215		*8.37*	8.27	57 15.178	3.0591	+ .0270	− .002	+40 22 25.80	20.044	.003	− .03	4	19.37
9969	BD+72° 1134	F5	*8.90*	8.92	57 24.50	3.0237	+ .0955	+ .0068	+72 51 46.28	20.044	.004	− .007	4	19.02
9970	BD−10° 6212	G0	8.7	8.88	57 26.599	3.0753	− .0035	+ .0014	− 9 52 32.28	20.044	.004	+ .030	4	18.38
9971	BD+20° 5419	K5	*8.54*	8.45	23 57 45.930	+3.0678	+ .0129	.000	+20 34 51.24	+20.044	− .004	+ .01	5	18.35
9972	30 Piscium	Mb	4.66	5.1	57 51.467	3.0741	− .0016	+ .0027	− 6 27 30.85	20.044	.005	− .034	4	17.99
9973	BD+68° 1420		*9.18*	8.9	57 57.04	3.0420	+ .0771	− .0020	+68 45 54.36	20.044	.005	− .035	4	19.03
9974	BD+59° 2815	K2	*8.56*	8.4	58 6.191	3.0539	+ .0519	− .003	+59 31 11.63	20.044	.005	+ .01	4	18.45
9975	BD+54° 3097	F8	*8.62*	9.1	58 6.555	3.0572	+ .0433	+ .001	+54 33 16.77	20.044	.005	+ .01	4	18.12
9976	BD+10° 5022	K0	8.52	8.64	23 58 15.614	+3.0708	+ .0074	− .003	+10 33 42.35	+20.045	− .006	− .03	4	18.04
9977	Brad 3201	F0	5.78	5.82	58 24.254	3.0714	+ .0060	− .0065	+ 8 2 28.01	20.045	.006	− .038	4	17.66
9978	BD− 5° 6100	F2	8.7	8.37	58 29.206	3.0736	− .0012	− .001	− 5 37 55.68	20.045	.006	+ .01	4	18.27
9979	BD+23° 4848	K2	*9.50*	9.5	58 35.455	3.0690	+ .0152	− .002	+24 6 27.86	20.045	.007	− .02	4	18.57
9980	BD+42° 4817	A0	7.72	7.7	58 36.333	3.0653	+ .0290	− .0013	+42 28 32.04	20.045	.006	− .011	4	18.83
9981	BD−22° 6251	G5	8.5	8.5	23 58 38.863	+3.0759	− .0105	+ .0069	−22 20 7.54	+20.045	− .007	+ .084	6	18.71
9982	BD+29° 5051	F2	*8.42*	8.32	58 45.236	3.0685	+ .0189	+ .0034	+29 53 26.86	20.045	.007	+ .014	4	18.73
9983	BD+31° 5024		*8.71*	8.57	58 59.522	3.0691	+ .0200	− .0021	+31 25 29.42	20.045	.007	− .036	4	18.35
9984	CD−25° 16766	F0	8.05	8.02	59 4.728	3.0752	− .0122	+ .0038	−25 2 2.63	20.045	.007	+ .011	4	18.34
9985	BD+78° 854		*9.18*		59 25.87	3.0559	+ .1516	+ .0114	+78 51 9.81	20.045	.007	+ .004	4	18.68
9986	BD−14° 6608		9.4		23 59 26.750	+3.0735	− .0054	+ .0012	−13 40 21.43	+20.045	− .008	+ .022	4	19.05
9987	BD+ 3° 4926	F0	*8.16*	7.70	59 34.254	3.0726	+ .0037	− .0021	+ 3 27 42.42	20.045	.008	− .008	5	18.20
9988	2 Ceti	A0	4.62	4.3	59 38.583	3.0734	− .0077	+ .0013	−17 46 52.47	20.045	.008	− .008	4	18.17
9989	Wi (1) 23h 1160	F0	7.26	7.16	59 49.506	3.0725	+ .0093	+ .0051	+13 56 2.01	20.045	.009	+ .009	4	18.17

582 MISCELLANEOUS STARS

MISCELLANEOUS STARS

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec.Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
9990	BD−20° 6723	K0	9.8		0 2 46.071	+3.0667	−0.0090	0.000	−20 21 34.17	+20.044	−0.012	−0.05	[illegible]	25.35
9991	BD−19° 6570	F5	8.5	8.1	0 2 57.172	+3.0667	− .0084	+ .002	−19 15 58.70	+20.043	− .014	+ .02	2	23.74
9992	CD−30° 12		9.2		4 0.888	3.0593	− .0149	+ .003	−29 51 41.83	20.042	.016	− .06	2	19.88
9993	BD+24° 16		9.4		9 41.059	3.0992	+ .0165	− .0018	+25 6 26.25	20.027	.028	− .007	2	19.90
9994	BD+62° 27		9.9		9 41.97	3.1851	+ .0659	− .001	+63 17 50.01	20.027	.028	− .03	2	19.37
9995	BD− 1° 17		9.8	ft.	10 57.392	3.0713	+ .0018	+ .001	− 1 14 26.44	20.022	.030	− .04	2	25.35
9996	BD+45° 40		9.5		0 11 0.302	+3.1399	+ .0351	− .006	+46 21 4.17	+20.022	− .031	.00	[illegible]	24.40
9997	BD+48° 55		8.9		11 41.573	3.1507	+ .0383	− .004	+48 50 4.81	20.019	.032	+ .01	2	19.89
9998	BD+59° 32	F8	9.4	9.3	15 22.93	3.2299	+ .0600	− .0272	+60 18 59.85	[illegible]	.039	+ .026	2	20.83
9999	BD−18° 39	G5	8.0	7.7	15 25.434	3.0433	− .0068	+ .002	−18 7 27.09	20.000	.039	− .01	2	19.90
10000	BD+57° 65		10.2		16 54.122	3.2266	+ .0540		+57 23 36.90	19.991	.043		2	19.88
10001	BD+59° 48	A0	9.2	9.1	0 19 29.09	+3.2700	+ .0612	+ .0037	+60 5 32.27	+19.973	− .049	− .004	2	20.83
10002	BD+ 0° 48	K0	*8.68*	8.5	19 48.418	3.0749	+ .0035	+ .0044	+ 1 5 42.52	19.970	.048	− .030	2	19.82
10003	BD+45° 119	F5	8.52	8.0	25 51.443	3.2259	+ .0365	− .007	+45 30 32.50	19.918	.061	.00	2	20.28
10004	BD+45° 121		10.2	ft.	26 19.336	3.2284	+ .0365		+45 27 59.41	19.913	.062		2 3	25.37 25.54
10005	CD−23° 222		10.7	ft.	32 19.926	2.9918	− .0084		−23 18 1.51	19.846	.070		2	15.71
10006	BD+38° 90	G5	5.42	5.95	0 36 46.565	+3.2457	+ .0304	− .0010	+39 1 11.54	+19.788	− .084	− .004	4	23.45
10007	CD−22° 219	K0	9.3	ft.	38 10.638	2.9798	− .0076	.000	−22 44 47.54	19.768	.081	+ .04	[illegible]	19.82
10008	BD−16° 120 *m.*	K0	9.2		38 57.318	3.0058	− .0044	+ .001	−16 29 19.00	19.756	.083	− .05	3	15.87
10009	BD+44° 169 *br.*	K2	8.1	7.8	44 6.492	3.3243	+ .0378	+ .0026	+44 32 11.60	19.675	.101	− .033	2	25.33
10010	BD+70° 52		9.0	9.4	44 39.79	3.8242	+ .1305	+ .0023	+70 59 48.87	19.666	.116	− .007	2	24.00
10011	BD+40° 193		9.9		0 53 24.198	+3.3363	+ .0337		+40 30 16.75	+19.504	− .121		[illegible]	19.86
10012	BD+38° 148	K0	6.60	6.58	53 42.845	3.3244	+ .0322	.0000	+39 2 37.98	19.497	.123	− .024	4	23.45
10013	BD+40° 199	A0	8.37	8.8	54 55.531	3.3437	+ .0339	+ .002	+40 30 39.01	19.472	.125	− .03	2	20.30
10014	BD−17° 177	F0	8.8	8.3	57 22.470	2.9732	− .0031	.000	−16 43 29.40	19.420	.115	− .07	2	20.46
10015	CD−24° 457	G5	9.8		59 3.110	2.9173	− .0068	+ .0071	−24 31 39.62	19.384	.117	− .167	2	20.49
10016	BD− 1° 137		9.6		0 59 48.182	+3.0638	+ .0044		− 1 28 43.70	+19.368	− .124		2	19.90
10017	CD−24° 496	A2	6.26	7.0	1 3 20.090	2.9071	− .0064	+ .008	−24 25 23.95	19.285	.124	− .05	2	20.39
10018	BD+38° 194	F8	8.0	7.75	3 28.719	3.3668	+ .0328	− .0049	+38 49 32.47	19.281	.143	− .018	4	23.45
10019	BD+49° 319		9.7		7 26.636	3.5312	+ .0492		+49 47 27.79	19.183	.157		2	25.49
10020					7 59.900	3.5348	+ .0493		+49 47 16.45	19.169	.159		[illegible]	23.52
10021	BD+49° 326	A0	8.0		1 8 48.312	+3.5402	+ .0494	− .001	+49 47 29.53	+19.150	− .161	+ .01	2	24.74
10022	BD+60° 190		9.5	8.6	9 9.75	3.7757	+ .0788	.000	+60 31 57.25	19.139	.172	+ .02	2	21.33
10023	BD+38° 220	G5	7.70	8.02	10 10.952	3.3993	+ .0334	+ .0011	+39 1 36.13	19.113	.158	− .019	[illegible]	23.45
10024	BD+61° 236		9.7		11 37.00	3.8417	+ .0850	− .003	+61 53 10.57	19.074	.178	.00	[illegible]	19.84
10025	BD+15° 182	F2	8.1	8.5	12 0.128	3.1891	+ .0142	+ .0026	+15 44 41.03	19.064	.152	− .007	2	24.31
10026	BD+57° 257	B5	7.9	7.1	1 14 49.208	+3.7529	+ .0703	− .0008	+57 47 16.26	+18.986	− .184	+ .001	2	23.28
10027	BD+52° 315	A	9.2	8.4	17 24.234	3.6578	+ .0571	.0000	+52 52 55.93	18.913	.185	+ .030	2	23.79
10028	BD+ 7° 214	G0	8.7	8.3	24 15.631	3.1363	+ .0100	+ .062	+ 7 32 39.23	18.706	.173	.00	2	19.94
10029	BD+10° 203	F8	8.37	8.5	29 29.750	3.1670	+ .0118	.000	+10 29 46.59	18.536	.184	− .107	2	20.42
10030	BD+38° 305	A0	8.6	8.77	[illegible] 38.482	3.5019	+ .0347	+ .0010	+38 56 53.94	18.395	.211	− .010	4	23.45
10031	BD+51° 357	B9	7.6	8.5	1 34 28.511	+3.7546	+ .0566	− .0004	+51 51 39.89	+18.366	− .227	− .037	2	19.83
10032	BD+29° 277		9.9		34 35.638	3.3783	+ .0252	+ .0064	+29 41 5.84	18.362	.205	+ .009	2	19.82
10033					34 53.426	3.3792	+ .0252		+29 41 8.95	18.351	.206		2	25.95
10034	BD+23° 227		9.9		38 20.648	3.3198	+ .0207	− .003	+23 57 52.95	18.228	.209	− .01	2	23.99
10035	BD+73° 94		9.9		38 28.79	5.0274	+ .2222		+74 6 10.24	18.223	.312		2	20.48
10036	BD−10° 370	F5	9.71		1 41 52.160	+2.9740	+ .0026	− .001	− 9 44 39.42	+18.097	− .194	− .03	2	19.98
10037	BD+51° 410		9.7		45 17.262	3.8150	+ .0565		+51 23 58.25	17.967	.254		2	24.94
10038					50 16.660	3.0616	+ .0068		1 1 36.64	17.769	.214		2	21.35
10039	BD+66° 181		*8.58*	9.4	59 3.08	4.6578	+ .1326	+ .0031	+67 17 27.37	17.401	.342	− .019	2	19.49
10040	CD−25° 803		9.2		59 30.305	2.7599	− .0021	+ .001	−25 10 18.05	17.381	.208	− .04	2	19.91

10008. $9^{m}4$–$11^{m}5$, 0″4, 348°.

10009. 14^{m}, 5″2, 84°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
10041	BD+49° 543		9.7		1 59 56.726	+3.8511	+0.0526		+49 22 4.31	+17.362	−0.288		2	19.49
10042	BD+38° 416	A2	7.70	7.75	2 4 1.424	3.6295	+ .0356	−0.0028	+38 58 9.87	17.181	.280	+0.001	4	23.45
10043	BD+53° 484		9.9		9 18 546	4.0542	+ .0641		+53 56 34.94	16.938	.324		2	19.96
10044	BD+29° 380		9.4		11 35.087	3.4842	+ .0257	+ .0040	+29 33 0.69	16.831	.283	− .039	2	21.36
10045	BD− 7° 392	A0	7.04	7.30	12 58.454	2.9834	+ .0049	− .004	− 6 56 54.84	16.765	.245	+ .01	3 2	24.66 25.95
10046	BD+38° 472	B9	7.72	7.95	2 19 14.406	+3.6901	+ .0355	+ .0005	+38 59 0.17	+16.458	− .314	− .014	4	23.45
10047	BD−14° 453	G0	9.1		21 53.861	2.8757	+ .0027	+ .003	−14 15 10.76	16.324	.250	− .05	[illegible]	20.35
10048	BD+22° 347	G5	8.08	8.7	22 26.434	3.3953	+ .0201	− .0005	+22 31 9.97	16.297	.295	− .026	[illegible]	20.50
10049	BD+38° 491	K0	6.91	6.90	24 58.108	3.7075	+ .0352	− .0004	+38 46 52.11	16.167	.327	− .018	4	23.45
10050	BD−20° 465	K2	8.9	8.6	25 15.847	2.7793	+ .0010	+ .045	−20 20 27.80	16.152	.247	+ .24	2	19.88
10051	BD+70° 186	A	8.6	8.9	2 27 18.93	+5.4239	+ .1846	+ .0045	+71 11 12.08	+16.045	− .479	+ .007	2	19.85
10052	BD+38° 500	G0	8.5	8.53	27 22.238	3.7220	+ .0353	+ .0096	+39 1 0.10	16.042	.331	+ .080	[illegible]	23.45
10053	BD+39° 571	B9	7.82	7.9	30 11.844	3.7621	+ .0368	+ .003	+40 14 48.82	15.892	.341	+ .02	2	23.32
10054	BD+39° 574		10.2		30 35.461	3.7635	+ .0368		+40 14 35.91	15.871	.342		2	24.49
10055	BD+61° 444	B9	6.80	6.6	32 43.35	4.6425	+ .0977	+ .0058	+62 14 44.99	15.757	.424	− .027	2	19.80
10056	BD+38° 527	B9	7.9	8.03	2 33 51.208	+3.7412	+ .0349	+ .0009	+38 48 17.14	+15.696	− .348	− .020	4	23.45
10057	CD−24° 1189	G5	8.3	8.1	36 18.288	2.6928	+ .0005	+ .005	−24 16 25.96	15.561	.254	.00	2	19.54
10058	BD− 1° 377 *br.*	F5	5.79	6.7	37 7.934	3.0574	+ .0078	+ .0140	− 1 2 6.18	15.515	.289	− .136	2	20.47
10059	BD−22° 477	F0	7.10	7.0	42 47.791	2.7207	+ .0014	+ .010	−21 59 50.41	15.197	.265	+ .03	[illegible]	14.05
10060	BD−19° 524		10.3		42 57.529	2.7683	+ .0020		−19 14 29.34	15.188	.270		2	19.86
10061	BD+36° 574	F0	8.8	8.3	2 46 12.891	+3.7354	+ .0320	+ .003	+36 46 59.62	+15.000	− .367	− .03	[illegible]	20.47
10062	BD+34° 527	K5	4.67	5.1	46 34.684	3.6883	+ .0297	+ .0016	+34 43 53.52	14.979	.363	− .074	3 2	21.85 25.95
10063	BD+52° 639	K5	8.2	8.3	46 49.968	4.2547	+ .0602	− .0015	+53 2 55.22	14.965	.419	+ .004	2	20.46
10064	....				48 59.996	4.0386	+ .0466		+47 4 16.58	14.838	.402		2	21.35
10065	CD−30° 1092		9.2	ft.	50 40.738	2.5509	+ .0002	+ .002	−29 56 49.68	14.740	.258	+ .02	2	25.38
10066	BD−22° 536	G0	9.3		2 59 32.662	+2.6780	+ .0020	− .002	−22 42 46.18	+14.203	− .282	+ .03	2	19.49
10067	CD−27° 1068	F5	8.9		3 0 20.486	2.5897	+ .0012	+ .015	−27 2 27.90	14.153	.273	+ .04	2	20.83
10068	BD+32° 560		10.7		0 20.659	3.6889	+ .0274		+33 4 3.37	14.153	.387		2	21.32
10069	BD+56° 799	B8	9.4	9.2	9 51.732	4.5862	+ .0693	+ .0023	+56 57 6.93	13.550	.499	+ .021	2	23.99
10070	BD+27° 489	F2	9.8		12 49.948	3.6066	+ .0225	− .006	+28 11 7.93	13.358	.397	+ .02	2	24.74
10071	....		9.5		3 15 29.418	+4.1940	+ .0457		+48 5 2.92	+13.184	− .466		2	24.39
10072	BD+38° 722	A0	8.1	8.77	21 4.157	3.8986	+ .0315	.0000	+38 47 12.22	12.813	.442	− .018	5 6	24.41 24.03
10073	BD+38° 737	F5	7.20	7.45	25 54.594	3.9156	+ .0311	+ .0010	+38 52 30.22	12.485	.452	− .040	5	23.82
10074	BD−19° 698	K2	8.6	8.7	28 12.820	2.6977	+ .0034	+ .002	−19 35 15.50	12.325	.316	− .03	[illegible]	20.47
10075	BD+38° 781		9.8		35 30.248	3.9339	+ .0297		+38 35 6.82	11.817	.468		2	25.05
10076	BD+38° 782 *br.*	A3	7.86	7.85	3 35 33.600	+3.9426	+ .0300	+ .0042	+38 51 33.50	+11.813	− .471	− .023	[illegible]	23.82
10077	....		9.4	9.1	36 22.748	3.9365	+ .0296		+38 35 20.94	11.754	.470		2	23.92
10078	BD+12° 510		10.0		44 50.468	3.3253	+ .0122		+12 48 54.19	11.148	.408		[illegible]	23.04
10079	BD+19° 617		10.0		50 30.334	3.4684	+ .0146		+19 19 12.50	10.733	.432		2	14.04
10080	....				52 54.66	6.0827	+ .1298		+69 19 19.08	10.555	.758		2	23.87
10081	BD+39° 904	A0	6.84	7.3	3 54 47.638	+4.0236	+ .0282	+ .0005	+39 47 12.10	+10.414	− .505	− .010	[illegible]	19.78
10082	BD+43° 871	K0	9.5		56 28.660	4.1736	+ .0331		+43 49 37.70	10.288	.527		2	22.54
10083	BD+38° 834	A3	7.62	8.00	3 57 8.442	3.9989	+ .0269	+ .0010	+38 52 30.24	10.238	.506	− .034	4	23.54
10084	BD+42° 896	K0	7.12	7.3	4 2 27.766	4.1573	+ .0303	+ .0082	+42 58 3.30	9.836	.533	− .086	2	19.54
10085	BD+30° 624		8.6	8.5	4 16.386	3.7598	+ .0194	− .0003	+30 25 54.78	9.697	.483	− .010	2	22.53
10086	BD+75° 166	G5	8.22	8.0	4 4 41.05	+7.7989	+ .2423	+ .0132	+76 5 15.11	+ 9.666	−1.000	− .237	2	19.88
10087	BD+38° 848	F0	6.84	7.30	4 58.604	4.0220	+ .0258	+ .0015	+39 1 0.07	9.643	.518	− .030	4 5	23.54 23.82
10088	BD− 9° 837	K0	5.88	6.68	6 56.490	2.8857	+ .0054	+ .002	− 9 1 39.32	9.493	.375	+ .016	3 2	21.92 25.48
10089	BD− 9° 843	G5	6.59	6.38	8 4.799	2.8849	+ .0054	+ .002	− 9 2 36.14	9.405	.376	− .01	3 2	21.93 25.49
10090	BD+22° 652		9.8	9.5	8 38.224	3.5630	+ .0146		+22 31 59.29	9.362	.464		2	24.44
10091	BD+79° 137	A2	8.9	8.9	4 9 48.13	+9.2755	+ .3685	− .0049	+79 11 9.52	+ 9.271	−1.202	− .005	2	24.50
10092	BD−20° 810		9.7		10 31.347	2.6442	+ .0038	− .004	−19 51 8.27	9.215	.347	+ .03	[illegible]	19.85
10093	BD+85° 62		9.2	9.5	10 54.21	18.819	+2.042	+ .0080	+85 41 10.73	9.186	2.442	− .012	2	20.11
10094	BD+45° 905	A2	7.17	8.0	11 34.325	4.3054	+ .0320	.000	+46 1 10.90	9.134	.562	+ .01	2	19.75
10095	BD+58° 734		8.78		13 39.247	5.0153	+ .0554	+ .0042	+58 24 4.46	8.971	.658	− .039	2	23.05
10096	BD−19° 886	K2	9.28		4 17 25.734	+2.6385	+ .0038	− .003	−19 49 18.49	+ 8.675	− .352	+ .03	2	22.37
10097	BD−21° 853		9.2		19 26.164	2.5892	+ .0036	.000	−21 47 3.51	8.516	.346	+ .02	2	24.89
10098	BD+61° 715		8.8	9.1	20 27.36	5.2771	+ .0622	− .005	+61 11 34.60	8.435	.699	− .02	1	19.73
10099	BD−15° 820		9.8		33 15.692	2.7390	+ .0042	− .014	−15 2 40.88	7.407	.375	− .16	2	19.91
10100	BD+63° 525		9.9		33 30.08	5.6000	+ .0646	− .002	+63 49 24.01	7.387	.762	− .01	2	23.05

10058. 9m0, 4″4, 320°.

10076. 9m1, 20″, 341°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
10101	BD−21° 933	G0	9.1		4 34 44.051	+2.5948	+0.0036	−0.001	−21 0 0.14	+7.287	−0.355	−0.04	2	18.96
10102	BD−22° 878	A0	8.1		36 39.878	2.5485	+ .0034	− .004	−22 46 10.42	7.129	.350	+ .02	2	19.77
10103	BD− 3° 881	A5	8.1	7.3	41 49.185	3.0055	+ .0055	+ .001	− 3 3 15.31	6.706	.416	.00	2	[illegible]
10104	BD+65° 432	G0	9.0	8.6	42 14.37	5.8416	+ .0659	+ .0063	+65 31 43.97	6.674	.806	− .025	2	19.34
10105	CD−27° 1888	G0	9.9		42 54.662	2.4149	+ .0033	+ .001	−27 32 24.29	6.616	.335	− .02	2	19.39
10106	BD+42° 1059	K0	8.5	8.6	4 42 59.694	+4.2269	+ .0212	− .005	+42 27 10.19	+6.609	− .585	.00	2	22.52
10107	BD−22° 914		9.6		43 39.085	2.5429	+ .0034	− .002	−22 45 31.80	6.555	.354	− .02	2	19.87
10108	BD+45° 1002		10.2		49 50.434	4.3912	+ .0224		+45 58 43.94	6.041	.613		2	24.55
10109	BD+39° 1107		10.2	9.1	50 27.312	4.1450	+ .0178		+40 3 28.89	5.989	.579		2	23.11
10110	BD+ 1° 869 *m.*	F5	8.2	8.3	53 57.197	3.1074	+ .0056	+ .003	+ 1 33 8.77	5.697	.437	+ .02	2	19.58
10111	BD+36° 987		9.8		4 57 45.262	+4.0138	+ .0143		+36 10 2.32	+5.377	− .566		2	23.85
10112	BD+38° 1012	B9	8.2	8.68	4 58 35.667	4.1072	+ .0154	+ .0018	+38 45 25.37	5.307	.580	− .012	4	23.54
10113	BD+75° 210		*8.90*		5 3 3.33	8.0344	+ .1219	+ .0029	+75 22 7.37	4.930	1.138	− .043	2	19.64
10114	CD−29° 2121	K0	8.4		9 52.933	2.3284	+ .0031	+ .002	−29 42 22.59	4.348	.333	− .03	2	20.09
10115			9.2		14 0.594	4.5735	+ .0172		+48 53 39.19	3.995	.655		2	22.97
10116	BD− 1° 859	B3	6.42	7.1	5 15 32.043	+3.0385	+ .0042	− .0011	− 1 29 37.70	+3.865	− .437	− .036	2	19.98
10117	BD+38° 1159	A0	8.2	8.75	21 13.546	4.1351	+ .0104	+ .0028	+38 53 16.63	3.375	.596	− .010	4	23.58
10118	BD+39° 1313		8.7	9.4	23 48.028	4.1521	+ .0100	+ .004	+39 16 48.62	3.153	.599	− .01	2	19.98
10119	BD− 2° 1260		9.2	9.5	24 39.574	3.0082	+ .0036	− .002	− 2 47 53.57	3.078	.435	.00	2	22.97
10120	BD−22° 1129	G5	7.72	7.7	26 18.310	2.5176	+ .0028	− .001	−22 46 50.26	2.937	.364	+ .01	2	19.43
10121	CD−24° 3196 *br.*	F8	7.5	7.8	5 30 12.444	+2.4719	+ .0027	.000	−24 23 19.82	+2.599	− .358	− .17	[illegible]	[illegible]
10122	BD− 5° 1320	B1	6.53	6.6	31 30.574	2.9458	+ .0032	+ .0009	− 5 28 6.02	2.486	.427	+ .015	2	20.82
10123	BD+51° 1093	K0	9.5	9.1	31 42.024	4.7284	+ .0123	+ .0007	+51 18 23.75	2.469	.685	− .060	2	21.97
10124	BD+17° 958	K5	10.3		32 11.561	3.4842	+ .0047		+17 14 2.03	2.426	.505		3 2	18.70 20.47
10125	BD+38° 1249	A0	8.0	8.82	35 52.799	4.1438	+ .0071	− .0018	+38 52 0.78	2.105	.601	− .040	4	23.58
10126	BD+38° 1250	*	8.0	8.17	5 36 1.530	+4.1166	+ .0069	− .0029	+38 8 50.15	+2.093	− .598	+ .008	3	21.35
10127	BD−22° 1202	K0	8.0	7.9	40 20.527	2.5126	+ .0025	− .002	−22 48 54.08	1.717	.366	+ .01	2	19.81
10128	BD+38° 1301	K2	8.6	8.3	43 39.154	4.1266	+ .0052	.000	+38 19 53.88	1.428	.601	− .04	2	20.32
10129	BD+32° 1099	K0	9.4	9.2	44 35.788	3.9369	+ .0044	+ .001	+32 56 53.13	1.346	.573	+ .02	2	19.32
10130	BD−10° 1295		9.6		47 3.518	2.8321	+ .0024	− .001	−10 13 17.17	1.131	.413	+ .01	2	24.97
10131	BD+38° 1341	K2	7.27	7.23	5 53 1.206	+4.1499	+ .0030	− .0018	+38 53 5.15	+0.610	− .604	+ .028	4	23.58
10132	CD−27° 2613		9.6		53 29.226	2.3788	+ .0023	− .004	−27 26 59.48	0.570	.347	− .05	2	20.59
10133	BD+47° 1235		9.4	9.1	5 56 29.275	4.5566	+ .0025		+47 59 54.52	+0.307	.664		2	18.98
10134	BD+26° 1079	K0	7.50	7.7	6 2 3.123	3.7442	+ .0013	+ .0018	+26 40 48.71	−0.179	.546	+ .008	2	19.55
10135	BD+19° 1240	B9	8.7		5 28.036	3.5360	+ .0010	− .002	+19 7 34.64	0.478	.515	− .01	2	20.02
10136	BD+45° 1257	B9	8.37	9.1	6 5 57.119	+4.4111	− .0005	− .0038	+45 3 12.82	−0.520	− .642	− .035	2	16.51
10137	BD+45° 1264		8.0	8.4	7 29.209	4.4117	− .0009	− .0006	+45 4 22.83	0.655	.642	− .048	2	19.81
10138	BD+66° 436		9.4		7 37.65	6.0950	− .0064	+ .0012	+66 9 31.67	0.667	.888	− .035	2	22.99
10139	BD+ 5° 1168	G0	5.81	5.8	13 1.816	3.1924	+ .0009	− .0158	+ 5 7 33.82	1.139	.464	+ .157	2	20.37
10140	BD+46° 1126		10.2		13 26.236	4.4883	− .0031		+46 41 52.63	1.175	.652		3	20.01
10141	BD− 7° 1365	K2	8.9	8.8	6 14 42.332	+2.8898	+ .0013	− .003	− 7 48 30.42	−1.285	− .420	− .001	2	20.82
10142	BD+57° 961		9.5		16 1.531	5.1731	− .0077		+57 35 50.60	1.400	.752		2	20.16
10143	BD+17° 1215	F8	9.9		16 47.680	3.4837	− .0001		+17 8 22.19	1.466	.506		2	20.67
10144	BD−10° 1501	K0	9.0	9.5	19 41.624	2.8205	+ .0013	− .003	−10 43 41.74	1.720	.409	+ .01	2	19.97
10145	BD+39° 1632	F0	7.8	8.20	21 27.262	4.1510	− .0037	− .0021	+39 1 19.57	1.874	.602	− .008	4	23.66
10146	BD− 4° 1504	A0	8.5	8.3	6 22 10.704	+2.9661	+ .0009	− .002	− 4 34 52.83	−1.936	− .429	+ .02	2	20.47
10147	BD− 4° 1510	B3	6.07	6.8	22 37.050	2.9669	+ .0008	− .0007	− 4 32 58.26	1.975	.429	+ .036	2	19.99
10148	BD− 8° 1441	F2	7.7	8.0	24 45.826	2.8762	+ .0010	− .005	− 8 24 44.06	2.162	.416	+ .16	2	20.02
10149	BD+ 5° 1279	B8	8.06	7.8	27 23.134	3.1907	.0000	− .003	+ 5 5 2.51	2.390	.460	− .01	2	19.53
10150	BD+31° 1340	G0	10.0		29 36.760	3.8810	− .0038		+31 22 44.55	2.583	.560		2	15.03
10151	BD+39° 1713	F2	6.96	7.63	6 37 3.496	+4.1396	− .0073	− .0018	+38 58 15.52	−3.227	− .594	− .088	4	23.66
10152	BD+11° 1277	K0	8.9		37 38.974	3.3427	− .0016	− .003	+11 34 25.17	3.278	.479	+ .01	2	25.58
10153	BD+12° 1248	G5	8.3	8.1	37 47.421	3.3550	− .0016	+ .003	+12 5 6.34	3.290	.481	+ .02	2	24.98
10154	BD+11° 1279		10.3		38 11.288	3.3423	− .0016		+11 36 57.87	3.325	.479		2	25.63
10155	BD+39° 1736	A0	7.20	7.78	40 28.164	4.1401	− .0080	− .0018	+39 3 14.07	3.521	.593	.000	4	23.67
10156	BD− 8° 1550		9.6		6 42 45.856	+2.8639	+ .0003		− 9 2 13.50	−3.719	− .409		2	22.97
10157	BD+47° 1351	A	9.2		45 17.337	4.5015	− .0136	.000	+47 28 32.46	3.935	.642	− .03	2	19.34
10158	BD+ 0° 1629		8.9		45 30.705	3.0917	− .0008	− .005	+ 0 49 44.48	3.954	.440	− .07	2	19.44
10159	BD− 7° 1597		10.7		47 17.755	2.9076	.0000		− 7 11 40.52	4.108	.413		2	19.97
10160	BD+39° 1771	F2	6.06	6.52	47 31.262	4.1304	− .0096	.0000	+38 57 57.54	4.127	.587	+ .004	4	23.67

10110. 8^{m}9-8^{m}9, 2″5, 173°. 10121. 11^{m}6, 4″2, 18°. 10126. A, G.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
10161	BD− 7° 1604		9.6		6 48 4.725	+2.9078	0.0000	−0.007	− 7 11 31.84	− 4.174	−0.413	−0.01	2	21.04
10162	BD+79° 222	G0	8.0	8.0	49 17.91	9.9648	− .1882	− .0054	+79 16 25.64	4.279	1.417	− .110	2	22.84
10163	BD−21° 1650	B9	8.7		51 47.530	2.5526	+ .0011	− .001	−21 46 8.09	4.492	.361	+ .03	2	24.17
10164	BD+ 0° 1750	F0	8.1	8.5	56 7.765	3.0771	− .0012	+ .002	+ 0 11 44.35	4.860	.434	− .01	2	24.03
10165	BD−19° 1649	A0	6.93	7.5	57 22.552	2.6185	+ .0008	− .002	−19 19 50.31	4.966	.368	− .02	2	19.99
10166	BD−22° 1666	A0	8.7	8.3	6 58 24.470	+2.5240	+ .0010	− .002	−22 59 25.76	−5.054	− .354	− .05	2	20.07
10167	BD− 4° 1806	A2	9.1	9.2	7 1 2.116	2.9730	− .0009	− .002	− 4 25 26.44	5.275	.416	+ .02	2	20.02
10168			10.4		1 15.016	3.4801	− .0048	.000	+17 32 21.35	5.294	.487	− .02	2	19.98
10169	BD− 4° 1810	F8	9.3		1 36.814	2.9730	− .0009	.000	− 4 25 26.22	5.324	.416	+ .01	2	20.08
10170	BD+38° 1693	A5	7.80	8.10	3 45.352	4.1036	− .0129	− .0018	+38 44 21.75	5.504	.573	− .003	4	23.66
10171	BD+ 6° 1572		9.7		7 9 26.634	+3.2223	− .0030		+ 6 41 20.03	− 5.981	− .446		2	19.40
10172	BD+24° 1592	A0	7.01	7.9	11 56.246	3.6568	− .0081	− .0006	+24 40 43.36	6.189	.505	− .017	2	22.69
10173	BD+41° 1628	K0	7.46	7.5	12 6.620	4.1808	− .0163	.000	+41 5 19.02	6.203	.577	− .01	2	20.07
10174	BD−16° 1860	A0	7.9	7.6	12 43.602	2.6948	+ .0003	− .001	−16 34 26.91	6.254	.371	− .05	2	23.53
10175	BD+38° 1731	K0	7.02	7.05	13 25.510	4.0932	− .0151	+ .0008	+38 49 7.80	6.312	.563	+ .008	4	23.66
10176	BD−22° 1790	A0	8.5	8.4	7 14 7.428	+2.5463	+ .0008	+ .002	−22 33 42.09	− 6.371	− .349	− .01	2	19.82
10177	BD+40° 1850	K0	8.1	7.7	17 36.266	4.1628	− .0174	− .002	+40 51 11.33	6.659	.569	+ .02	2	22.70
10178	BD+38° 1760	G5	7.05	7.10	22 8.247	4.0799	− .0168	.0000	+38 49 40.74	7.031	.554	− .033	4	23.66
10179	BD−19° 1892	B9	8.1	7.9	23 45.328	2.6225	+ .0005	+ .002	−19 50 10.37	7.164	.354	− .02	2	22.70
10180	BD+39° 1958	A0	6.46	6.90	26 29.941	4.0811	− .0178	− .0030	+39 3 56.41	7.387	.550	− .028	4	23.67
10181	BD+54° 1150	F5	9.2		7 26 34.056	+4.7770	− .0352	+ .0001	+53 54 49.05	− 7.393	− .644	− .042	2	20.82
10182	BD+14° 1684	K5	*8.95*	8.7	26 35.483	3.4006	− .0062	+ .006	+14 47 19.83	7.395	.458	− .23	2	22.56
10183	CD−26° 4467	A0	9.0		27 27.511	2.4458	+ .0010	− .002	−26 49 1.11	7.465	.328	+ .02	4	19.15
10184	BD+38° 1789		*9.99*		30 19.752	4.0467	− .0179		+38 17 11.51	7.698	.541		2	19.37
10185	BD−10° 2118		9.8		31 31.957	2.8346	− .0008		−10 56 47.05	7.794	.377		2	20.83
10186	BD+39° 1978 *m.*	A0	7.8	8.3	7 32 0.813	+4.0705	− .0188	− .001	+39 2 49.70	− 7.833	− .543	+ .01	2	25.16
10187	BD+39° 1979	A5	7.10	7.18	32 23.264	4.0702	− .0190	− .0003	+39 3 30.65	7.863	.542	− .016	4	23.66
10188			10.0		32 51.268	3.7238	− .0120		+27 55 51.66	7.901	.496		2	20.56
10189	BD+18° 1710		8.2	8.5	36 46.778	3.4786	− .0084	− .003	+18 24 53.36	8.215	.459	+ .01	2	19.96
10190	BD+ 7° 1827		9.4		40 16.760	3.2387	− .0051		+ 7 48 23.80	8.493	.424		2	22.74
10191					7 45 15.546	+3.7593	− .0145	− .006	+29 49 9.37	− 8.886	− .487	− .04	2	24.02
10192	BD+33° 1610		8.1	8.3	48 30.278	3.8425	− .0170	− .003	+32 54 48.36	9.140	.495	− .02	2	22.85
10193	BD+60° 1095		9.4		49 1.35	5.1960	− .0625	− .008	+60 46 23.40	9.180	.669	− .08	2	20.58
10194	BD−15° 2158		9.8		7 54 46.030	2.7403	− .0003		−15 50 8.77	9.625	.347		3	21.50
10195	BD−17° 2308		9.4	9.3	8 0 37.894	2.7031	.0000		−17 44 17.42	10.070	.336		2	19.69
10196	BD+40° 1995		8.4		8 2 16.657	+4.0407	− .0251	− .004	+40 4 22.59	−10.195	− .503	.00	1	22.97
10197	BD+46° 1356 *n. pr.*	G5	9.1		2 20.520	4.2816	− .0329	+ .004	+46 25 14.35	10.199	.533	+ .08	1	21.87
10198	BD+38° 1861	F0	6.99	7.40	2 29.500	3.9577	− .0238	− .0003	+38 48 44.40	10.211	.497	− .014	4	23.66
10199	BD+ 2° 1885		9.1		5 2.257	3.1214	− .0046	+ .005	+ 2 26 32.10	10.402	.385	− .01	2	22.56
10200	BD+39° 2065	G0	6.47	7.17	6 3.545	3.9943	− .0245	− .0078	+38 58 12.52	10.478	.492	− .075	4	23.67
10201	BD−17° 2372	K2	8.2	8.6	8 6 45.040	+2.7042	+ .0001	.000	−17 57 18.66	−10.529	− .334	− .07	2	19.96
10202	BD+58° 1108		9.7		11 46.055	4.8636	− .0609		+57 56 41.74	10.901	.591		2	22.62
10203	CD−29° 5812	F0	10.3	ft.	12 2.522	2.4355	+ .0017	− .005	−29 37 20.07	10.920	.293	− .01	2	20.62
10204	BD+39° 2082	G5	7.7	7.82	12 37.762	3.9802	− .0255	.0000	+39 2 56.40	10.963	.481	− .008	4	23.66
10205	BD+ 4° 1957	A2	7.95	7.8	17 0.142	3.1622	− .0056	− .004	+ 4 37 53.91	11.282	.376	+ .01	2	19.52
10206	CD−29° 6052	A0	9.6		8 19 35.188	+2.4460	+ .0019	− .005	−29 45 39.32	−11.468	− .288	.00	2	20.59
10207	BD+19° 2006		9.5		21 15.006	3.4552	− .0120		+19 19 49.78	11.587	.406		2	21.13
10208	CD−28° 6102	B5	8.4	7.9	25 45.628	2.4909	+ .0019	.000	−28 25 19.74	11.906	.287	+ .06	2	19 68
10209	BD−13° 2577	A0	9.5		28 32.920	, 2.7938	− .0007		−13 27 42.58	12.102	.323		2	25.63
10210	BD+ 4° 2010		10.1		35 30.716	3.1574	− .0062		+ 4 39 11.44	12.582	.351		[illegible]	19.58
10211	BD− 0° 2041		9.5		8 36 46.806	+3.0629	− .0043	.000	− 0 32 33.06	−12.668	− .341	.00	2	19.56
10212	BD− 0° 2043		9.3		36 51.130	3.0629	− .0043	− .003	− 0 32 36.47	12.673	.341	+ .01	2	19.56
10213	BD+18° 2022	K0	7.88	7.93	38 35.496	3.4158	− .0124	− .0014	+18 26 17.60	12.790	.378	+ .010	2 3	25.16 21.71
10214	CD−24° 7310		9.1		38 59.600	2.5951	+ .0018	− .002	−24 55 44.33	12.817	.285	− .02	2	20.08
10215	BD− 8° 2471	A0	9.0		40 14.935	2.9090	− .0018	.000	− 9 5 30.63	12.902	.320	+ .01	2	20.17
10216	BD+40° 2105		10.1		8 41 28.096	+3.9375	− .0305		+40 20 30.79	−12.983	− .432		2	21.23
10217	BD− 0° 2067	K0	8.2	8.3	43 23.534	3.0585	− .0043	+ .003	− 0 48 11.95	13.111	.332	+ .03	2	19.74
10218	CD−27° 5939	A2	9.0		44 51.868	2.5500	+ .0024	− .004	−27 28 21.03	13.208	.274	− .01	2	20.23
10219	BD− 6° 2744 *br.*	A0	8.3	8.0	47 48.388	2.9598	− .0025	− .003	− 6 29 1.80	13.400	.315	− .01	2	19.70
10220	BD−20° 2718 *br.*	F8	9.4		52 21.853	2.7066	+ .0013	− .003	−20 33 47.44	13.694	.283	− .02	[illegible]	20.23

10186. $7^{m}9$–$10^{m}4$, 0″4, 20°. 10197. $9^{m}4$, 7″0, 156°. 10219. $10^{m}6$, 6″0, 163°. 10220. $11^{m}5$, 1″5, 112°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
10221	BD−11° 2499		9.8		8 52 26.796	+2.8672	−0.0008		−11 53 38.11	−13.699	−0.299		2	[redacted]
10222	BD+ 6° 2087	K0	6.31	6.8	57 17.967	3.1724	− .0070	−0.004	+ 5 57 18.81	14.006	.325	−0.02	2	19.51
10223	BD+39° 2193	Mb	6.70	7.22	58 40.632	3.8439	− .0306	− .0015	+39 3 33.22	14.092	.392	− .030	4	23.67
10224	BD+44° 1817	K2	8.0	7.0	8 59 9.838	3.9809	− .0370	− .0009	+43 45 34.96	14.124	.406	− .006	2	19.47
10225	BD−20° 2777		9.9	ft.	9 0 41.248	2.7240	+ .0016	− .006	−20 18 43.82	14.217	.273	− .03	2	20.05
10226	CD−28° 6966	G0	7.7	8.0	9 5 36.566	+2.5696	+ .0035	− .015	−28 38 0.55	−14.516	− .252	+ .03	[redacted]	[redacted]
10227	BD+53° 1320 *s. pr.*	K2	8.1	7.4	8 56.074	4.2782	− .0571	− .1741	+53 1 47.47	14.716	.417	− .596	[redacted]	19.61
10228	BD− 1° 2221	K5	9.4		9 29.320	3.0401	− .0038	− .003	− 2 3 45.79	14.749	.294	− .06	2	14.04
10229	BD+39° 2223	F2	6.75	7.03	9 55.454	3.8025	− .0311	− .0102	+38 56 21.52	14.774	.369	+ .070	4	23.67
10230	BD+ 7° 2102	F8	8.6	8.6	12 54.148	3.1912	− .0078	− .004	+ 7 34 52.79	14.950	.304	− .05	2	21.16
10231	BD−21° 2751	F2	8.6		9 14 7.296	+2.7254	+ .0024	+ .002	−21 25 35.08	−15.020	− .261	− .05	2	19.62
10232	BD+51° 1505		9.6		18 28.434	4.1526	− .0533		+51 16 43.78	15.269	.366		2	22.77
10233	BD−20° 2941	K0	9.0		30 26.014	2.7659	+ .0029	− .004	−20 42 43.94	15.926	.238	.00	2	[redacted]
10234	BD− 6° 2989	B9	8.0	8.5	40 54.485	2.9881	− .0017	− .004	− 6 20 7.49	16.466	.242	− .03	2	19.57
10235	BD−11° 2770		10.1	9.4	54 37.902	2.9320	+ .0007		−11 26 26.62	17.120	.218		2	20.17
10236	BD+71° 524	G5	8.1	8.2	9 55 54.17	+5.0901	− .1781	+ .0082	+71 9 0.66	−17.178	− .375	− .019	2	19.74
10237	CD−23° 8928	G5	6.88	7.0	9 58 1.976	2.7790	+ .0054	− .007	−23 25 15.83	17.273	.198	.00	[redacted]	19.51
10238	BD+ 1° 2401	K0	9.3	8.7	10 2 59.482	3.0878	− .0044	− .002	+ 1 19 40.62	17.489	.217	+ .01	[redacted]	24.79
10239	BD+39° 2318	Ma	8.0	7.97	4 33.042	3.5918	− .0320	.0000	+38 49 24.87	17.555	.246	− .040	4	23.70
10240	BD− 0° 2300		9.4		4 52.446	3.0610	− .0032		− 1 2 35.20	17.569	.208		2	19.78
10241	BD+42° 2097		9.3	9.3	10 7 38.882	+3.6358	− .0360	+ .001	+41 49 41.12	−17.684	− .242	− .01	[redacted]	20.28
10242	BD−14° 3055	F8	8.71	8.9	8 47.062	2.9021	+ .0030	+ .002	−15 18 38.54	17.731	.190	− .07	[redacted]	23.64
10243	BD− 8° 2888	K2	8.9	8.8	13 1.846	2.9813	+ .0005	− .001	− 8 38 33.65	17.901	.187	+ .01	[redacted]	[redacted]
10244	BD+ 6° 2283	F5	8.7		13 38.139	3.1332	− .0062	− .005	+ 5 46 23.39	17.925	.197	+ .01	[redacted]	19.70
10245	CD−23° 9169	K0	9.3		14 34.846	2.8169	+ .0064	+ .002	−23 19 42.29	17.961	.175	+ .04	3	25.29
10246	BD−12° 3160	K0	9.3	8.5	10 21 27.804	+2.9470	+ .0026	+ .004	−12 43 10.65	−18.221	− .171	.00	2	21.52
10247	BD+37° 2086	K	10.0		25 38.703	3.4759	− .0291	.000	+37 0 43.59	18.370	.195	.00	2	22.69
10248	BD−20° 3194		9.9		26 34.696	2.8712	+ .0063		−20 49 31.36	18.403	.158		2	[redacted]
10249	BD−11° 2906	K5	8.7	9.3	29 24.597	2.9629	+ .0028	− .004	−12 2 56.42	18.499	.159	+ .05	2	20.12
10250	BD+39° 2366	G5	7.8	8.40	31 14.149	3.4806	− .0311	+ .0015	+38 56 43.07	18.560	.184	.000	[redacted]	23.70
10251	BD−19° 3070	A5	8.1	8.3	10 34 54.060	+2.8947	+ .0066	− .004	−20 9 37.15	−18.679	− .145	− .01	2	21.14
10252	BD+28° 1915		9.1	8.6	35 55.076	3.3322	− .0202	− .0009	+28 25 42.91	18.711	.166	+ .006	2	20.17
10253	BD+78° 359	[redacted]	7.58	8.7	36 16.49	5.2866	− .3192	− .0107	+77 49 47.80	18.722	.267	+ .028	2	23.71
10254	BD+52° 1511	G0	9.8		43 6.488	3.6405	− .0522	− .0012	+52 13 33.29	18.927	.166	− .027	2	22.09
10255	CD−25° 8259	F5	10.3		45 22.180	2.8659	+ .0098	− .001	−25 48 37.41	18.992	.126	− .01	2 3	19.67 21.55
10256	BD+39° 2386	F5	7.53	8.00	10 48 3.824	+3.4040	− .0299	− .0003	+38 45 38.25	−19.066	− .145	− .054	[redacted]	23.70
10257	BD+25° 2314[1] *s. f.*	A0	6.30	7.2	51 17.570	3.2582	− .0169	− .0055	+25 10 34.97	19.151	.133	− .017	[redacted]	23.81
10258	BD+ 1° 2504		10.2		10 52 54.093	3.0777	− .0022		+ 0 44 9.12	19.192	.122		2	22.63
10259	BD+39° 2419 *m.*	F2	7.56	8.40	11 0 30.556	3.3489	− .0289	− .0052	+38 50 33.84	19.374	.117	− .050	[redacted]	23.70
10260	BD−18° 3112		9.5		5 11.625	2.9633	+ .0082		−19 4 8.37	19.474	.094		2	19.64
10261	BD+56° 1511	K0	7.55	7.5	11 13 55.560	+3.4779	− .0570	− .0039	+56 37 56.06	−19.641	− .093	− .005	2	21.24
10262	BD+ 6° 2448	K2	7.68	7.4	21 3.612	3.0972	− .0035	− .004	+ 6 10 45.75	19.756	.068	− .01	[redacted]	20.11
10263	BD+57° 1324	A2	6.13	6.9	25 15.286	3.3856	− .0553	− .0101	+57 10 45.54	19.815	.066	− .010	2	20.11
10264	CD−25° 8864	A3	7.36	8.4	43 17.531	3.0263	+ .0147	− .008	−25 31 2.25	19.992	.025	− .01	2	[redacted]
10265	BD− 4° [redacted]	K2	8.65	8.5	47 44.832	3.0661	+ .0040	− .004	− 5 18 58.34	20.016	.016	− .04	2	[redacted]
10266	BD+26° 2270	K0	7.04	7.0	11 51 17.423	+3.0974	− .0135	− .0042	+25 58 3.41	−20.031	− .009	− .005	2	[redacted]
10267			10.5		52 2.55	3.1568	− .0557	− .010	+61 6 38.07	[redacted]	.008	− .02	2	[redacted]
10268	BD+ 8° 2552		9.57	9.3	54 3.188	3.0776	− .0027	+ .001	+ 7 59 31.10	[redacted]	− .003	+ .01	2	[redacted]
[redacted]	BD+18° 2551		10.3		11 55 28.178	3.0815	− .0083		+18 21 13.61	20.041	.000		2	[redacted]
10270	BD+ 9° 2581	G5	9.7	9.1	12 0 49.666	3.0719	− .0029	− .007	+ 9 9 36.62	20.045	+ .010	+ .04	[redacted]	[redacted]
10271	BD+39° 2492	F5	8.0	8.46	12 1 19.162	+3.0665	− .0222	− .0005	+39 6 10.26	−20.045	+ .011	− .034	4	23.71
10272	BD+14° 2478	G5	9.7		7 41.714	3.0615	− .0051		+14 1 3.95	20.034	.023		[redacted]	21.25
10273	BD+39° 2506	F0	7.52	8.08	11 28.522	3.0184	− .0208	− .0055	+39 6 16.06	[redacted]	.031	− .020	4	23.71
10274	BD− 8° 3316	G0	7.44	7.8	14 25.217	3.0852	+ .0071	− .0026	− 8 27 29.23	[redacted]	.037	− .065	2	14.83
10275	BD− 1° 2663		10.3		21 2.541	3.0764	+ .0040	− .003	− 1 43 27.00	19.961	.050	+ .06	2	22.18
10276	BD+39° 2520	K0	7.64	7.82	12 21 29.430	+2.9721	− .0192	.0000	+38 47 28.83	−19.957	+ .049	− .042	4	23.71
10277	BD+53° 1545	K5	9.5		21 42.978	2.9030	− .0324	− .0020	+53 19 10.40	[redacted]	.049	+ .014	2	19.84
10278	BD− 5° 3497		9.1	8.7	22 21.112	3.0855	+ .0061	− .005	− 5 35 52.35	19.950	.053	− .04	2	21.25
10279	BD− 6° 3574	K0	9.3		[redacted]	3.0899	+ .0070	− .002	− 7 8 18.66	19.939	.055	− .01	2	24.17
10280	CD−25° 9334	F2	9.2		31 51.980	3.1613	+ .0186	+ .003	−25 33 1.23	19.852	.073	+ .05	2	20.30

10227. $8^{m}1$, 19″, 70°.

10257. $4^{m}51$, 6″4, 288°.

10259. $8^{m}2$-$8^{m}4$, 0″5, 231°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
10281	BD+44° 2218		*9.33*		12 38 35.752	+2.8589	−0.0201	−0.002	+43 39 47.72	−19.762	+0.079	0.00	2	24.85
10282	BD+21° 2456		10.9	ft.	43 57.274	2.9733	− .0064		+21 18 44.05	19.678	.091		2	19.71
10283	CD−26° 9398	G5	10.7	ft.	51 13.696	3.2238	+ .0209		−27 1 29.01	19.546	.112		2	20.29
10284	....			9.1	12 55 2.226	3.0387	+ .0018		+ 6 6 16.93	19.470	.114		[illegible]	19.71
10285	BD+60° 1443		10.2		13 3 12.63	2.4347	− .0240		+60 17 54.59	19.288	.105		[illegible]	23.32
10286	BD+39° 2611	B9	6.22	6.92	13 6 1.217	+2.7657	− .0130	.0000	+38 57 35.23	−19.219	+ .123	− .008	5	23.99
10287	BD+15° 2553	F5	10.0		7 58.938	2.9673	− .0016		+15 5 52.59	19.170	.135		2	23.28
10288	CD−23° 10980	F8	9.8		11 3.016	3.2521	+ .0196	− .007	−23 45 22.99	19.090	.153	− .03	2	20.62
10289	BD+ 4° 2712	G0	8.1		12 0.763	3.0410	+ .0036	− .004	+ 4 23 10.83	19.064	.145	+ .02	[illegible]	16.37
10290	BD+35° 2462 *m.*	A5	6.80	7.5	29 14.431	2.7133	− .0085	− .005	+35 19 5.15	18.545	.159	− .01	2	19.87
10291	BD−22° 3649	F2	9.8		13 38 30.636	+3.3065	+ .0199	.000	−22 46 15.64	−18.222	+ .209	− .01	[illegible]	19.77
10292	BD− 1° 2851	K0	8.1	7.9	38 46.942	3.0928	+ .0077	− .005	− 2 3 55.51	18.212	.196	+ .02	2	19.87
10293	BD+77° 519	A5	6.63	7.3	39 52.97	0.5802	+ .0819	− .0073	+77 14 49.40	18.171	.044	+ .004	2	20.90
10294	BD− 5° 3760	G0	9.1		41 46.964	3.1336	+ .0098	− .003	− 6 3 7.56	18.101	.204	− .03	2	19.90
10295	BD− 3° 3532	G5	9.2	8.7	43 13.852	3.1092	+ .0087	− .002	− 3 35 32.03	18.046	.205	+ .01	2	24.22
10296	BD+ 5° 2798		9.3		13 43 30.124	+3.0192	+ .0046	− .010	+ 5 14 44.49	−18.036	+ .[illegible]	− .02	[illegible]	17.24
10297	BD+39° 2680	K0	5.57	6.05	13 43 32.684	2.6012	− .0079	− .0118	+38 56 32.55	18.034	.173	− .028	4	23.70
10298	BD−21° 3858	K0	10.0		14 6 55.946	3.3525	+ .0195		−21 42 19.77	17.048	.265		2	15.33
10299	CD−25° 10211	K0	9.55		7 9.694	3.4065	+ .0222	− .010	−25 22 12.63	17.038	.268	+ .03	2	20.25
10300	BD+50° 2054 *n. f.*	G5	*9.17*	9.4	8 5.986	2.2092	− .0054	− .017	+50 37 29.74	16.995	.178	+ .11	2	16.40
10301	CD−25° 10219	K2	9.5		14 8 10.806	+3.4084	+ .0221	− .006	−25 20 6.79	−16.991	+ .270	.00	2	25.31
10302	BD+38° 2529	G5	8.9		10 43.070	2.5147	− .0043	+ .004	+37 43 1.93	16.872	.205	− .02	3	21.80
10303	BD+36° 2454	F8	8.8	8.6	10 57.961	2.5492	− .0040	− .003	+35 54 53.93	16.860	.208	.00	2	16.41
10304	BD− 5° 3845	A3	6.24	7.3	12 9.058	3.1525	+ .0106	− .0045	− 6 15 0.55	16.804	.257	− .022	2	19.92
10305	BD− 4° 3660	F2	9.3	8.2	13 40.384	3.1340	+ .0099	− .002	− 4 45 50.18	16.731	.259	+ .04	2	19.66
10306	BD+39° 2758	F0	8.3	8.4	14 19 25.364	+2.4577	− .0036	.0000	+38 50 43.55	−16.449	+ .212	− .006	4	23.33
10307	BD+39° 2764	K0	6.32	6.83	22 13.208	2.4490	− .0033	− .0012	+38 45 14.24	16.308	.214	− .029	4	23.31
10308	CD−29° 11071		11.0	ft.	22 36.570	3.5172	+ .0256		−29 42 42.87	16.288	.305		2 3	17.32 20.03
10309	BD−18° 3832		10.2		24 27.086	3.3405	+ .0176		−18 46 34.26	16.194	.293		2	19.74
10310	BD− 6° 4026	A0	8.1	8.1	29 27.390	3.1654	+ .0110	− .002	− 6 31 7.78	15.932	.288	.00	2	14.77
10311	BD+20° 2997	F8	8.4	8.6	14 33 47.381	+2.7671	+ .0014	− .004	+20 11 43.44	−15.699	+ .258	− .08	2	20.25
10312	BD− 1° 2988	K0	8.6	8.8	45 0.958	3.0936	+ .0088	− .003	− 1 21 19.04	15.070	.304	− .09	2	25.27
10313	BD−14° 4045	F5	7.10	7.25	46 38.746	3.3057	+ .0149	− .006	−14 41 51.55	14.975	.327	+ .01	2	22.44
10314	BD−17° 4196	F5	6.67	7.5	47 6.223	3.3527	+ .0165	− .0022	−17 27 30.34	14.949	.332	− .128	2	22.67
10315	BD−14° 4067		10.2		50 43.732	3.3150	+ .0151	− .003	−14 58 25.75	14.736	.334	− .01	2	23.94
10316	BD−14° 4069	A0	8.3		14 51 7.132	+3.3162	+ .0151	− .003	−15 0 58.19	−14.713	+ .335	+ .02	2	22.44
10317	BD+33° 2526	K0	9.2	8.5	57 16.792	2.4600	+ .0002	− .001	+33 16 31.81	14.341	.256	− .01	2	22.70
10318	BD+53° 1754		10.4		57 49.020	1.8216	+ .0036		+53 12 4.30	14.308	.192		2	24.28
10319	BD− 7° 3946	A2	6.69	7.0	14 58 14.164	3.1966	+ .0113	− .0040	− 7 31 32.18	14.283	.334	+ .016	2	14.72
10320	BD+39° 2832	F8	7.50	8.03	15 1 39.207	2.3043	+ .0002	− .0020	+38 54 54.10	14.071	.245	+ .016	4	23.31
10321	BD−15° 4027	G5	9.7		15 2 15.039	+3.3433	+ .0152		−15 50 1.89	−14.034	+ .355		3	22.44
10322	BD+39° 2839		9.5		7 41.420	2.2753	+ .0007	− .008	+39 14 51.73	13.690	.248	.00	2	21.49
10323	CD−25° 10795	K0	10.4		8 38.390	3.5470	+ .0210	− .002	−25 49 50.57	13.629	.385	− .05	2	25.45
10324	BD+39° 2847	K0	*8.08*	8.50	10 12.281	2.2752	+ .0009	+ .0038	+38 57 51.08	13.529	.251	− .020	4	23.31
10325	BD+57° 1558	F8	9.4		11 0.749	1.5289	+ .0092	+ .001	+57 20 56.57	13.477	.171	+ .03	[illegible]	24.43
10326	BD−19° 4082		10.1		15 16 29.210	+3.4438	+ .0171		−20 9 53.62	−13.119	+ .385		2	20.28
10327	BD+39° 2875	F0	6.60	7.10	25 32.788	2.2271	+ .0018	+ .0036	+38 59 57.82	12.509	.259	− .008	4	23.31
10328	BD+46° 2123	G5	8.6	8.8	50 9.259	1.8933	+ .0044	− .004	+46 17 19.32	10.759	.238	− .01	2	19.72
10329	BD− 0° 3044		9.1		54 50.676	3.0940	+ .0079	− .002	− 1 4 12.68	10.410	.390	.00	[illegible]	15.23
10330	BD−10° 4226	K5	8.7	9.2	57 10.264	3.2972	+ .0108	+ .0028	−11 3 13.83	10.236	.417	+ .040	4	20.34
10331	BD− 6° 4342	K0	8.9	8.4	15 57 44.902	+3.1985	+ .0093	− .001	− 6 14 23.00	−10.193	+ .406	+ .05	2	20.31
10332	BD− 0° 3058	K2	8.23	8.6	16 4 1.191	3.0785	+ .0075	− .004	− 0 16 54.75	9.717	.397	+ .06	2	20.33
10333	BD− 1° 3135	K2	9.3	9.2	5 21.776	3.1022	+ .0077	.000	− 1 26 23.46	9.613	.401	− .02	2	20.33
10334	CD−26° 11249	G0	8.4		6 42.212	3.6688	+ .0171	+ .003	−26 52 17.25	9.511	.475	− .02	2	19.96
10335	BD−15° 4300	A0	8.8	8.3	14 52.516	3.4017	+ .0113	+ .001	−15 21 9.34	8.876	.448	− .01	2	24.46
10336	CD−29° 12503	K2	7.86	7.0	16 18 49.072	+3.7701	+ .0173	− .004	−29 59 43.34	− 8.565	+ .501	+ .03	2	23.32
10337	BD+39° 2996	F8	8.04	8.10	24 14.839	+2.0829	+ .0036	− .0030	+39 1 17.02	8.133	+ .281	− .002	4	23.36
10338	BD+72° 736		9.2		33 17.71	−0.9060	+ .0641	+ .0009	+72 39 56.39	7.405	− .120	+ .008	2	22.84
10339	BD−18° 4305		10.4	ft.	35 51.292	+3.4844	+ .0105		−18 16 3.27	7.195	+ .478		2	20.39
10340	CD−23° 12890	K0	8.6		36 24.334	3.6070	+ .0122	+ .001	−23 10 10.65	7.150	.494	+ .04	2	20.34

10290. 7^{m}3–7^{m}8, 0″.4, 230°.

10300. 8^{m}7, 11″, 257°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
10341	BD−21° 4404		9.5		16 38 20.890	+3.5670	+0.0114	−0.003	−21 32 16.14	− 6.991	+0.490	0.00	2	23.34
10342	CD−27° 11113	F5	8.4	8.2	39 51.880	3.7209	+ .0132	− .005	−27 18 27.71	6.867	.512	− .01	2	19.78
10343	BD−21° 4412	A2	9.5		42 37.266	3.5728	+ .0109	− .004	−21 37 59.45	6.640	.494	+ .01	2	23.34
10344	BD+22° 3024		10.2		46 7.958	2.5420	+ .0034		+22 43 10.31	6.349	.355		2	22.86
10345	BD+14° 3124	G5	8.9	9.3	46 11.676	2.7526	+ .0040	− .008	+14 10 19.61	6.345	.383	− .06	2	19.76
10346	BD+36° 2789		9.4	9.2	16 47 53.698	+2.1428	+ .0034	+ .006	+36 11 43.35	− 6.204	+ .300	+ .01	2	20.42
10347	BD+44° 2623	G5	8.4	7.9	50 31.616	1.8180	+ .0045	− .002	+44 31 53.89	5.984	.255	+ .06	2	20.74
10348	BD+ 8° 3322	K2	8.1	8.5	55 44.010	2.8889	+ .0044	− .005	+ 8 8 45.72	5.548	.408	+ .01	2	19.95
10349	BD+39° 3071	K0	7.20	7.70	16 57 49.330	2.0292	+ .0036	+ .0010	+39 1 34.12	5.372	.287	− .046	4	23.41
10350	BD+32° 2838		9.3		17 0 12.866	2.2446	+ .0032	− .003	+32 40 33.38	5.170	.318	+ .01	2	22.83
10351	BD− 5° 4401	K0	8.6	8.6	17 1 51.693	+3.2100	+ .0058	− .007	− 6 3 29.40	− 5.031	+ .455	− .08	2	20.32
10352	BD+69° 890		9.0	9.2	3 14.11	−0.4050	+ .0313	+ .0040	+69 34 6.11	4.914	− .055	+ .032	2	20.76
10353	BD+38° 2892	K2	7.8	7.78	7 28.165	+2.0251	+ .0035	− .0025	+38 50 5.66	4.554	+ .290	.000	4	23.41
10354	CD−23° 13237	G0	9.0		8 53.510	3.6518	+ .0085	.000	−23 57 26.56	4.433	.521	− .05	2	20.32
10355	BD+39° 3091	K0	7.17	7.15	10 45.993	2.0125	+ .0034	+ .0005	+39 4 40.00	4.273	.289	− .022	4	23.41
10356	BD+40° 3125	K0	7.57	7.4	17 14 29.960	+1.9713	+ .0034	+ .001	+40 3 12.49	− 3.954	+ .284	+ .03	2	23.89
10357	BD−19° 4595	K2	9.5		14 35.693	3.5360	+ .0069	− .002	−19 28 33.49	3.945	.507	.00	2	19.80
10358	BD+23° 3077		9.9		15 6.702	2.5120	+ .0030		+23 9 34.28	3.901	.361		2	22.94
10359	BD+38° 2910	K0	5.98	6.68	15 41.991	+2.0148	+ .0033	− .0012	+38 53 34.16	3.850	+ .290	+ .070	4	23.41
10360	BD+75° 628		9.3		23 4.28	−2.1080	+ .0508	.000	+75 42 56.63	3.216	− .302	− .01	2	23.86
10361	BD− 8° 4445 *m.*		9.2		17 23 53.183	+3.2721	+ .0046	+ .002	− 8 35 30.71	− 3.146	+ .473	− .06	2	20.37
10362	BD+39° 3147	F2	6.45	6.60	27 59.794	2.0033	+ .0031	+ .0003	+38 56 28.64	2.790	.290	+ .008	4	23.41
10363	CD−24° 13380	F5	8.0	8.5	28 6.692	3.6693	+ .0060	− .0003	−24 15 49.65	2.780	.529	− .121	2	25.32
10364	BD−20° 4818 *m.*	A2	8.1	8.5	31 59.656	3.5794	+ .0051	.000	−20 54 23.34	2.444	.519	− .03	2	23.34
10365	BD− 8° 4468	G0	9.2		32 44.784	+3.2672	+ .0038	.000	− 8 20 26.37	2.378	+ .474	+ .11	2	21.85
10366	BD+71° 852		9.3		17 40 30.69	−0.7999	+ .0157	− .0155	+71 1 31.97	− 1.703	− .115	− .139	2	22.83
10367	BD+51° 2248	F5	8.7	9.3	40 51.007	+1.3886	+ .0040	− .0002	+51 39 56.61	1.673	+ .202	+ .024	2	20.49
10368	BD+38° 2997	K0	6.51	7.15	43 13.810	1.9968	+ .0027	+ .0005	+38 54 43.37	1.465	.291	− .036	4	23.41
10369	CD−28° 13690	K0	8.9		45 59.243	3.8010	+ .0039	− .006	−28 38 9.88	1.226	.553	− .05	2	20.00
10370	CD−29° 14106	A	10.0		47 26.628	3.8306	+ .0037	+ .002	−29 35 51.10	1.098	.557	− .04	2	21.91
10371	CD−34° 12237	A0	6.88		17 48 54.276	+3.9973	+ .0037	− .005	−34 42 40.02	− 0.970	+ .583	− .01	2	21.36
10372	BD+38° 3025	K0	7.20	7.10	50 2.434	1.9978	+ .0025	− .0014	+38 50 14.60	0.871	.291	.000	4	23.41
10373	BD+23° 3235		9.9		56 18.768	2.4909	+ .0022		+23 31 50.64	0.323	.363		2	23.87
10374	BD+36° 2991		9.2	8.9	17 57 18.282	2.0989	+ .0024	+ .001	+36 5 1.73	− 0.236	.306	− .03	2	23.52
10375	CD−23° 13866	G5	8.7	8.5	18 0 3.018	3.6594	+ .0016	+ .001	−23 42 9.95	+ 0.005	.534	− .03	2	19.97
10376					18 1 28.654	+1.2168	+ .0025		+54 14 40.08	+ 0.129	+ .178		2	21.92
10377	BD+38° 3075	F0	7.6	7.98	3 10.605	1.9911	+ .0022	+ .0008	+38 59 23.30	0.278	.290	− .017	4	23.41
10378	BD+26° 3178 *m.*	A3	6.00	6.0	4 36.016	2.4185	+ .0021	− .0016	+26 5 18.63	0.402	.353	+ .020	2	20.38
10379	CD−23° 13998	B	9.0		4 54.020	3.6578	+ .0010	.000	−23 39 36.35	0.429	.534	+ .02	2	20.87
10380	BD+24° 3340	G0	7.6	7.7	5 40.180	2.4739	+ .0020	+ .0069	+24 8 31.50	0.496	.361	+ .079	2	19.52
10381	BD+24° 3346	K0	8.6	7.6	18 5 57.928	+2.4737	+ .0020	− .0026	+24 9 9.84	+ 0.522	+ .360	− .046	2	20.39
10382	BD−20° 5020	[illegible]	8.7		6 37.973	3.5783	+ .0008	− .001	−20 43 48.08	0.580	.521	− .03	2	19.96
10383	BD−15° 4852	A0	10.1		6 58.454	3.4417	+ .0010	− .009	−15 26 28.60	0.610	.501	+ .06	2	20.06
10384	BD− 0° 3440	F0	9.1		8 47.692	[illegible]	+ .0013	.000	− 0 46 51.63	0.769	.450	− .03	2	19.99
10385	CD−29° 14685		10.7	ft.	8 54.510	3.8202	+ .0001	+ .002	−29 14 19.83	0.779	.556	.00	2	20.07
10386	BD−18° 4857	B5	8.9		18 10 17.618	+3.5316	+ .0005		−18 58 5.92	+ 0.900	+ .514		2	25.44
10387	BD+38° 3113	A0	[illegible]	6.20	10 24.640	2.0013	+ .0020	− .0010	+38 45 1.68	0.910	.291	+ .008	4	23.41
10388	BD−18° 4862	K5	8.9	8.8	10 45.328	3.5310	+ .0004		−18 57 0.81	0.940	.514		2	19.56
10389	BD+66° 1087	K0	7.34	7.2	11 45.13	0.0593	− .0008	+ .0025	+66 6 44.31	1.028	.008	+ .030	2	22.84
10390	BD− 2° 4569	K0	9.4		14 11.193	3.1345	+ .0009	− .001	− 2 39 12.84	1.240	.456	+ .05	2	23.52
10391	BD+ 2° 3559	K0	8.1	7.8	18 14 26.079	+3.0045	+ .0012	.000	+ 2 55 45.40	+ 1.262	+ .436	.00	2	22.82
10392	CD−24° 14174	A	10.7	ft.	14 32.164	3.6847	− .0005		−24 39 23.80	1.270	.536		2	21.91
10393	BD+39° 3383	A0	7.96	8.00	17 6.435	1.9914	+ .0019	− .0031	+39 3 20.07	1.495	.289	− .022	4	23.41
10394	BD− 2° 4615	A0	8.7		20 43.328	3.1209	+ .0006	− .002	− 2 4 29.87	1.810	.452	− .03	2	19.90
10395	BD+ 1° 3666		9.4	8.7	21 17.527	3.0425	+ .0007	− .003	+ 1 18 5.13	1.859	.441	+ .01	2	23.44
10396	BD+23° 3330		9.8		18 22 17.414	+2.5048	+ .0016		+23 7 17.56	+ 1.946	+ .363		2	19.92
10397			10.5	8.8	26 30.138	2.3090	+ .0017	+ .0003	+29 54 49.15	2.313	.333	− .023	1	20.31
10398	BD+ 5° 3788		10.4		29 52.028	2.9340	+ .0006	− .005	+ 5 58 40.66	2.605	.423	+ .06	2	24.62
10399	BD+ 5° 3804		9.0		31 41.208	2.9553	+ .0005	.000	+ 5 4 8.41	2.763	.426	.00	2	22.55
10400	CD−25° 13291	G0	7.44	7.8	32 15.008	3.7104	− .0031	+ .0121	−25 43 55.69	2.811	.535	− .279	2	19.90

10361. 9$^{\mathrm{m}}$6–10$^{\mathrm{m}}$4, 2″9, 96°.

10364. 8$^{\mathrm{m}}$8–9$^{\mathrm{m}}$0, 0″3, 343°.

10378. 5$^{\mathrm{m}}$92, 14″, 182°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
10401	BD+38° 3229	A0	6.87	6.95	18 32 40.832	+2.0081	+0.0016	−0.0008	+38 49 44.39	+ 2.849	+0.289	−0.002	4	23.15
10402	BD− 7° 4644		9.4		35 15.804	3.2432	− .0008	.000	− 7 21 26.98	3.072	.466	+ .01	2	20.98
10403	BD−17° 5292	A0	9.4		37 45.473	3.4993	− .0025	− .003	−17 55 48.18	3.287	.502	.00	2	24.03
10404	BD+27° 3095	F0	7.24	7.7	41 11.360	2.3730	+ .0014	+ .0001	+28 1 8.23	3.583	.339	− .018	2	19.99
10405	BD+40° 3478		9.1	8.9	42 26.634	1.9618	+ .0013	− .001	+40 13 24.53	3.691	.280	− .01	2	22.55
10406	Nova Aquilæ '18	Pec	Var.	3.02	18 44 49.631	+3.0614	− .0006		+ 0 29 38.13	+ 3.896	+ .437		5	18.47
10407	BD−11° 4760	A0	9.1		45 1.522	3.3337	− .0021	+ .0058	−11 15 49.50	3.913	.475	− .020	2	20.03
10408	BD−22° 4890	A0	9.4		46 54.513	3.6001	− .0043	.000	−21 57 12.59	4.074	.513	− .04	[illegible]	19.93
10409	BD+38° 3336	B9	7.68	7.78	50 31.771	2.0231	+ .0012	+ .0009	+38 49 52.31	4.384	.286	− .010	4	23.14
10410	CD−29° 15524	A2	7.14	7.9	51 3.800	3.8125	− .0069	− .002	−29 34 48.48	4.429	.540	− .02	2	19.58
10411	BD−11° 4825	B8	9.4		18 53 34.260	+3.3398	− .0029	+ .005	−11 36 43.67	+ 4.643	+ .471	+ .02	[illegible]	19.86
10412	BD− 4° 4658	K5	9.1	8.5	55 51.142	3.1743	− .0018	− .002	− 4 28 45.86	4.838	.447	+ .01	2	23.89
10413	BD+28° 3142		10.5		56 19.608	2.3534	+ .0013		+29 1 34.43	4.877	.331		2	19.52
10414	BD+52° 2322		10.3		59 13.559	1.3756	− .0017		+52 43 9.63	5.123	.192		2	20.05
10415	BD+20° 4028		9.8	9.5	18 59 47.782	2.5988	+ .0008	− .001	+20 9 23.06	5.171	.364	+ .04	2	19.59
10416	BD+39° 3622		9.2		19 0 40.180	+1.9900	+ .0010	+ .001	+40 0 40.74	+ 5.245	+ .278	− .04	2	21.39
10417	BD+38° 3441 *br.*	A3	7.82	7.72	5 4.139	2.0413	+ .0010	+ .0005	+38 48 2.88	5.615	.284	.000	4	23.14
10418	BD−18° 5245	F0	10.0		7 15.144	3.4977	+ .0056		−18 22 34.47	5.798	.486		2	25.43
10419	BD+44° 3071	F0	8.9	8.3	7 23.993	1.8191	+ .0003	+ .001	+44 25 35.96	5.810	.252	− .03	2	20.08
10420	BD−18° 5247	K2	10.2		7 45.513	3.4979	+ .0057		−18 23 55.82	5.840	.485		2	20.06
10421	BD−20° 5454	K5	9.33		19 9 18.600	+3.5386	− .0062	.000	−20 3 45.34	+ 5.970	+ .490	− .02	2	21.43
10422	BD+37° 3371		9.5		9 28.090	2.0912	+ .0011		+37 34 53.07	5.983	.289		[illegible]	19.90
10423	BD+38° 3490 *br.*	B3	4.48	4.88	11 2.043	2.0418	+ .0010	.0000	+39 0 27.32	6.114	.281	− .003	4	23.14
10424	BD−16° 5247	K0	8.6	8.0	12 36.092	3.4416	− .0055	.000	−16 11 41.55	6.244	.475	− .05	2	24.05
10425	CD−26° 14043	B9	9.0		13 46.604	3.6970	− .0088	− .001	−26 13 11.82	6.342	.509	+ .01	[illegible]	19.93
10426	BD+38° 3515	A0	8.1	7.9	19 14 3.760	+2.0470	+ .0009	− .0005	+38 59 22.46	+ 6.365	+ .280	− .005	2	21.63
10427	BD+38° 3520	K0	6.56	7.0	14 35.940	2.0483	+ .0009	.0000	+38 58 35.08	6.410	.280	− .035	[illegible]	24.65
10428		K5			15 16.932	3.1117	− .0025		− 1 45 55.62	6.467	.427		2	20.08
10429	BD+27° 3352		9.9		17 55.942	2.3635	+ .0011		+27 32 40.55	6.685	.329		2	24.07
10430	BD+38° 3575	K2	7.6	7.30	21 25.641	2.0561	+ .0009	− .0045	+39 3 17.83	6.973	.279	− .044	4	23.14
10431	BD+17° 3970	A2	8.7	8.9	19 22 49.310	+2.6862	+ .0001	− .002	+17 10 59.26	+ 7.088	+ .363	.00	2	19.58
10432	BD+30° 3571		10.4		23 53.888	2.3224	+ .0011		+31 1 6.40	7.175	.313		3 2	20.64 20.61
10433	BD− 3° 4611	F8	8.3	9.1	26 5.806	3.1455	− .0033	+ .001	− 3 21 0.13	7.354	.423	+ .02	2	19.52
10434	BD+49° 3059	G5	6.63	6.6	33 47.325	1.6086	− .0015	− .0007	+50 3 31.08	7.976	.212	+ .032	2	20.60
10435	BD+54° 2187	Ma	7.56	7.4	35 44.896	1.3428	− .0044	− .0010	+54 46 32.21	8.132	.176	+ .021	2	21.07
10436	BD+63° 1554	A	9.1		19 39 13.81	+0.6037	− .0175	− .001	+63 50 6.50	+ 8.410	+ .076	− .03	2	19.79
10437	CD−27° 14232	G5	9.8		39 28.284	3.6942	− .0123	+ .002	−27 8 18.14	8.429	.485	− .20	3 2	25.56 25.61
10438			9.9		40 12.077	2.4607	+ .0010	− .004	+26 49 3.45	8.488	.322	+ .06	2	21.03
10439	BD+11° 3987	A	9.5	8.7	43 33.336	2.8164	− .0008	− .001	+12 2 8.17	8.752	.365	− .01	[illegible]	23.55
10440	BD+10° 4054 *br.*	F5	9.8	8.7	43 59.843	2.8518	− .0011	− .001	+10 25 8.20	8.787	.370	.00	3 2	22.35 25.12
10441	BD+62° 1754	K0	8.3	8.6	19 45 5.98	+0.7891	− .0146	+ .002	+62 18 44.57	+ 8.873	+ .099	− .02	2	19.90
10442	BD+ 9° 4305		9.8		49 40.392	2.8780	− .0013	− .004	+ 9 19 18.30	9.230	.369	+ .02	2	15.62
10443	BD+38° 3809	B9	8.2	7.83	51 2.176	2.1186	+ .0012	+ .0008	+38 53 50.49	9.337	.269	− .010	4	23.14
10444	BD− 7° 5114	A0	7.64	7.9	52 53.430	3.2302	− .0057	.000	− 7 37 8.69	9.479	.411	.00	2	14.23
10445	Nova Cygni '20	Pec	Var.	4.51	56 24.600	1.5005	− .0035		+53 24 1.08	9.749	.187		6	20.66
10446	BD+38° 3862	A0	7.14	7.30	19 57 42.380	+2.1306	+ .0013	.0000	+38 59 9.94	+ 9.848	+ .266	− .014	4	23.14
10447	BD+41° 3582	G5	10.3		59 33.241	2.0383	+ .0010		+41 45 38.50	9.989	.253		2	23.54
10448					19 59 38.079	2.0381	+ .0010		+41 46 9.27	9.995	.253		2	25.95
10449	BD+27° 3608		9.2	9.5	20 2 13.750	+2.4705	+ .0013	+ .0004	+27 37 29.82	10.191	+ .306	+ .016	2	23.45
10450	BD+76° 773	K2	9.6	9.5	3 8.91	−1.8023	− .1428	+ .0017	+76 44 55.41	10.260	− .230	− .024	2	22.61
10451	BD− 9° 5364	A5	9.0		20 3 34.616	+3.2664	− .0069	.000	− 9 35 14.62	+10.292	+ .404	− 01	2	20.12
10452	BD+60° 2085		9.5		5 37.85	1.0258	− .0123	− .004	+60 52 22.85	10.446	.123	− .02	2 3	21.09 22.55
10453	BD+45° 3072	F2	10.3		6 54.352	1.9143	+ .0005		+45 32 38.08	10.541	.232		2	19.73
10454					7 54.907	1.5976	− .0025		+52 27 33.19	10.616	.193		2	21.59
10455					8 58.927	2.5728	+ .0010		+23 51 37.62	10.695	.312		2	21.61
10456	BD+38° 3963	A2	6.97	6.90	20 11 1.872	+2.1654	+ .0017	+ .0045	+38 54 54.61	+10.846	+ .260	+ .012	4	23.14
10457	BD+68° 1114		9.3	8.8	16 11.11	0.1910	− .0409	+ .0007	+68 58 51.21	11.223	.018	− .039	2	20.60
10458	BD+52° 2678	A2	9.8		17 3.517	1.6064	− .0025	+ .0017	+53 0 45.95	11.286	.189	+ .030	2	23.09
10459	BD+28° 3715		8.8	9.4	18 38.914	2.4677	+ .0018	− .0010	+28 49 43.26	11.400	.292	+ .006	2	19.76
10460	BD−14° 5738	K0	8.6	8.9	21 11.572	3.3412	− .0093	− .0099	−13 49 51.71	11.583	.390	− .042	2	19.56

10406. $-1^{m}2$ to $9^{m}2$.
10417. $8^{m}9$, $1''3$, 122°.

10423. $8^{m}6$, 28″, 83°.
10440. 13^{m}, $4''6$, 27°.

10445. $2^{m}5$ to $8^{m}7$.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
10461	BD+41° 3729	K2	9.2	9.5	20 21 16.556	+2.1061	+0.0018	−0.003	+41 33 23.68	+11.589	+0.245	+0.04	[illegible]	19.70
10462	BD+47° 3103		8.7	8.2	22 41.321	1.8807	+ .0005	− .005	+47 40 29.40	11.690	.218	− .05	[illegible]	20.60
10463	BD+47° 3107	A0	8.1	9.3	23 28.512	1.8812	+ .0006	− .006	+47 44 2.90	11.745	.217	− .04	2	23.46
10464	BD+28° 3762	A	8.2	7.9	25 16.597	2.4940	+ .0018	+ .0010	+28 15 27.23	11.871	.287	− .026	1	20.52
10465	BD+38° 4102	G5	7.11	6.80	25 29.595	2.1995	+ .0023	+ .0015	+39 3 43.98	11.888	.253	+ .018	4	23.14
10466	BD− 8° 5384	A3	8.0	7.9	20 27 46.304	+3.2363	− .0075	+ .003	− 8 42 34.40	+12.048	+ .373	− .01	2	14.30
10467	BD+14° 4331 *br.*		8.4	8.5	27 51.591	2.7978	− .0005	+ .001	+14 26 11.86	12.054	.321	− .01	2	22.61
10468	BD+48° 3148	A2	6.54	6.2	28 24.731	1.8505	+ .0003	− .0001	+48 56 34.41	12.093	.210	− .005	[illegible]	19.62
10469	BD+33° 3954		9.8		31 13.998	2.3621	+ .0025		+33 56 28.45	12.288	.267		[illegible]	26.45
10470	BD+52° 2749	A0	7.24	7.5	31 30.434	1.6955	− .0013	− .0033	+52 33 4.76	12.307	.190	− .019	[illegible]	19.31
10471					20 32 37.787	+2.3657	+ .0025		+33 56 6.17	+12.384	+ .265		2	21.09
10472	BD+61° 2030		9.0	9.1	33 17.86	1.0839	− .0139	− .006	+62 12 10.05	12.430	.119	.00	2	19.30
10473	BD+27° 3821		9.6		36 12.532	2.5208	+ .0021	− .0039	+28 0 17.68	12.629	.280	+ .026	2	19.22
10474	BD+38° 4187	B9	6.44	6.65	38 0.656	2.2438	+ .0029	.0000	+38 47 48.18	12.751	.247	.000	[illegible]	23.14
10475	BD−22° 5511	G5	7.16	7.0	38 46.582	3.5037	− .0149	− .001	−22 44 29.62	12.803	.387	+ .04	2	19.62
10476	BD− 8° 5464	A0	8.6	8.6	20 41 6.990	+3.2165	− .0075	+ .002	− 8 1 32.31	+12.959	+ .352	+ .02	3 2	24.27 25.15
10477	BD− 9° 5577	K0	10.3		42 51.120	3.2388	− .0082		− 9 18 47.10	13.075	.353		[illegible]	23.80
10478	BD− 2° 5366	K0	8.2	8.2	42 55.864	3.1078	− .0053	+ .002	− 1 59 14.91	13.079	.338	+ .01	2	19.31
10479	BD−18° 5778 *n. pr.*	G5	7.7	7.9	43 52.326	3.4102	− .0127	+ .0020	−18 29 42.28	13.142	.370	− .018	2	19.77
10480	BD−21° 5839 *n. pr.*	G5	9.2		44 19.100	3.4577	− .0141	+ .0132	−20 54 52.27	13.172	.374	− .101	2	19.79
10481	BD+38° 4235 *br.*	A3	7.01	7.20	20 44 58.666	+2.2593	+ .0033	.0000	+38 59 30.66	+13.215	+ .242	− .010	[illegible]	23.14
10482	BD+81° 716		10.0		45 38.53	−4.2606	− .5467	+ .0024	+82 13 3.63	13.259	− .485	+ .038	4	24.51
10483	BD+16° 4376		9.5		46 16.179	+2.7626	+ .0005		+17 13 55.43	13.300	+ .296		2	22.78
10484	BD+59° 2291	F8	8.46	8.6	50 14.07	1.3628	− .0079	− .0034	+60 4 19.79	13.558	.140	− .045	[illegible]	19.62
10485	BD+18° 4668	K0	7.28	7.3	56 17.606	2.7551	+ .0010	+ .001	+18 18 23.35	13.943	.283	− .02	[illegible]	23.30
10486	BD+65° 1525		10.3		20 56 44.98	+0.9524	− .0212	− .0047	+65 40 48.81	+13.972	+ .094	− .064	2	23.11
10487	BD+38° 4318 *m.*	F0	7.50	7.40	58 45.566	2.3049	+ .0042	− .0010	+38 56 44.42	14.097	.233	− .015	4	23.14
10488	BD+31° 4321	K0	8.2	7.4	20 59 52.766	2.4892	+ .0037	+ .0003	+31 40 53.17	14.166	.251	− .015	2	19.76
10489	BD− 5° 5482		10.0		21 4 48.174	3.1602	− .0068		− 5 24 22.96	14.468	.313		2	22.81
10490	BD+37° 4194		9.4		5 46.179	2.3704	+ .0046		+37 19 52.17	14.526	.232		3 2	22.70 22.70
10491	BD−19° 6039	G5	9.4		21 6 6.710	+3.3998	− .0142	− .017	−19 34 57.65	+14.547	+ .335	− .02	2	19.75
10492			11.	ft.	6 11.736	2.3758	+ .0047		+37 10 28.51	14.552	.232		[illegible]	22.71 22.69
10493	BD+18° 4723		9.4		6 37.628	2.7561	+ .0015	− .003	+19 2 32.72	14.578	.270	− .02	[illegible]	22.81
10494	BD+37° 4204 *m.*		8.8		7 26.448	2.3768	+ .0048	− .001	+37 17 37.45	14.627	.230	.00	2	22.70
10495	BD+36° 4447	K2	7.9	8.0	7 30.840	2.3801	+ .0048	− .001	+37 10 15.91	14.631	.231	− .02	2	22.69
10496	BD+56° 2537	G0	9.3		21 8 22.270	+1.6801	− .0009	+ .0018	+56 50 37.07	+14.682	+ .161	+ .072	2	19.22
10497	BD+37° 4218		10.6		8 36.862	2.3805	+ .0048		+37 17 42.07	14.697	.230		[illegible]	22.72
10498			11.	ft.	9 14.130	2.3864	+ .0049		+37 8 31.77	14.734	.230		2	22.69
10499	BD+36° 4461		10.1		9 17.930	2.3903	+ .0049		+36 59 34.70	14.737	.230		2	22.70
10500	BD+46° 3228	A0	8.1	8.0	10 12.653	2.1184	+ .0046	− .002	+46 36 57.16	14.791	.202	+ .02	2	22.84
10501	BD+50° 3319	A2	9.1		21 19 6.075	+2.0261	+ .0048	− .0005	+50 29 36.58	+15.305	+ .184	− .020	2	19.26
10502	BD+38° 4476	B9	7.8	7.38	20 7.016	2.3774	+ .0059	+ .0010	+39 0 23.42	15.362	.216	− .016	4	24.17
10503	BD+45° 3519		9.8		20 22.560	2.1841	+ .0059		+46 1 45.85	15.376	.197		2	[illegible]
10504	BD+26° 4146	F0	9.1	9.4	20 50.822	2.6503	+ .0039	+ .0036	+26 17 15.01	15.403	.240	− .009	2	20.21
10505	BD− 6° 5757	G5	8.0	7.8	22 22.287	3.1671	− .0074	+ .002	− 6 20 52.37	15.488	.286	− .01	2	19.33
10506	CD−29° 17783	K0	10.4	ft.	21 22 33.394	+3.5519	− .0219	− .001	−29 29 4.69	+15.498	+ .322	− .07	2	19.72
10507	BD−22° 5724	F5	9.7		32 4.352	3.4083	− .0167	+ .002	−22 39 26.34	16.013	.292	− .05	3 2	17.77 19.72
10508	BD+52° 2979	B8	8.1	8.9	32 55.790	2.0313	+ .0061	− .0004	+52 28 25.62	16.058	.171	− .019	2	23.20
10509					34 1.47	0.1793	− .0803		+74 38 25.71	16.115	.009		2	19.23
10510	BD+38° 4558	B9	6.66	6.40	34 33.729	2.4321	+ .0072	+ .0028	+38 57 23.73	16.143	.204	.000	5	22.93
10511	BD− 2° 5627	F0	9.2	8.5	21 41 30.592	+3.0967	− .0050	+ .001	− 1 48 24.74	+16.496	+ .251	.00	2	19.31
10512	BD+ 9° 4902	F2	9.0	9.3	45 8.096	2.9487	− .0003	− .007	+ 9 29 25.47	16.674	.232	− .03	2	[illegible]
10513	BD+49° 3635		8.7	8.4	47 1.760	2.2114	+ .0091	+ .001	+49 37 4.99	16.765	.170	.00	2	22.67
10514	BD+38° 4618 *m.*	A3	8.0	7.33	47 8.136	2.4785	+ .0086	− .0005	+39 4 4.88	16.770	.191	.000	5	22.93
10515	BD− 7° 5651	K5	9.7		47 10.500	3.1672	− .0076		− 7 21 37.73	16.770	.245		2	19.66
10516	BD+39° 4699		9.3	ft.	21 49 55.194	+2.4659	+ .0091	+ .004	+40 11 8.69	+16.903	+ .186	.00	2	20.32
10517	BD+31° 4574	K0	7.6	8.3	51 13.133	2.6286	+ .0074	+ .0161	+31 57 18.55	16.963	.197	− .250	2	19.26
10518	BD−13° 6009	F5	9.1		55 47.100	3.2329	− .0105	+ .002	−13 5 7.72	17.173	.236	+ .04	2	20.78
10519	BD+38° 4656 *m.*	A0	7.08	6.85	57 44.252	2.5251	+ .0068	+ .0018	+38 51 39.02	17.260	.180	.000	4	[illegible]
10520	BD+19° 4844	F5	8.7	9.2	21 58 31.662	2.8257	+ .0042	− .004	+20 4 41.08	17.295	.201	− .02	2	24.33

10467. 14^m, 3″5, 80°.
10479. 7^{m}3, 16″, 114°.
10480. 9^m[illegible], [illegible]7, 144°.
10481. 14^m, 2″3, 257°.
10487. 8^{m}0-8^{m}6, 1″1, 300°.
10494. 9^{m}3-9^{m}8, 2″7, 21°.
10514. 8^{m}7-8^{m}7, 0″3, 166°.
10519. 7^{m}7-8^{m}0, 0″1, 343°.

No.	Name	Sp.	Mag.	Obs. Mag.	R. A. 1920.0	Prec.	Sec. Var.	P. M.	Decl. 1920.0	Prec.	Sec. Var.	P. M.	No. Obs.	Epoch 1900+
					h m s	s	s	s	° ′ ″	″	″	″		
10521	BD− 5° 5697	F0	8.0	8.2	22 0 24.455	+3.1337	−0.0062	−0.0034	− 5 13 41.29	+17.378	+0.220	+0.01	2	19.33
10522	BD+41° 4378	F2	8.2	8.4	2 30.839	2.4913	+ .0109	+ .001	+41 34 23.48	17.469	.170	+ .01	2	19.73
10523	BD+38° 4693	A0	7.8	7.70	5 6.635	2.5530	+ .0106	+ .0022	+38 58 46.65	17.579	.172	+ .008	4	23.23
10524					10 52.086	2.5573	+ .0117		+40 4 31.08	17.815	.163		2	23.81
10525	BD+47° 3746		10.2		12 24.868	2.4026	+ .0136		+47 56 46.34	17.877	.151		2	19.32
10526	BD+12° 4793	K0	7.54	7.0	22 12 44.878	+2.9388	+ .0020	− .002	+12 31 15.35	+17 890	+ .185	+ .04	2	15.29
10527	CD−28° 17730	F2	8.9		18 24.655	3.3769	− .0205	+ .007	−27 57 25.35	18.108	.203	− .02	2	18.16
10528	CD−26° 16110	G0	7.84	8.4	18 44.486	3.3545	− .0190	+ .0292	−26 14 41.74	18.119	.201	− .122	2	23.19
10529	BD+34° 4669		9.5		19 27.125	2.6809	+ .0110	− .002	+34 36 52.10	18.147	.158	.00	2	21.87
10530	BD+78° 787		9.2		20 20.19	0.2383	− .1144	− .001	+78 45 56.96	18.180	.007	− .01	3	21.46
10531	BD+48° 3723		10.7		22 21 59.626	+2.4346	+ .0155		+49 1 27.82	+18.240	+ .140		2	19.78
10532	BD+20° 5151		9.1		22 14.863	2.8639	+ .0060	+ .002	+20 41 24.78	18.249	.164	− .03	2	19.33
10533	BD− 0° 4360	G0	9.47		23 24.632	3.0723	− .0030		+ 0 2 18.04	18.291	.175		2	19.67
10534	BD+57° 2542	A0	8.4	8.9	25 28.028	2.2149	+ .0166		+58 0 46.63	18.364	.122		2	20.29
10535	BD+38° 4787	A3	8.7	7.30	27 44.254	2.6512	+ .0133	.0000	+38 50 2.02	18.443	.144	− .060	4	23.23
10536	BD+39° 4869	F5	8.7	8.8	22 28 35.461	+2.6466	+ .0138	+ .0028	+39 23 14.16	+18.472	+ .142	.000	2	19.30
10537	BD+24° 4604	K0	8.66	8.3	29 6.920	2.8291	+ .0083	− .0002	+25 15 44.27	18.489	.151	+ .004	2	22.32
10538	BD− 1° 4313	G0	8.8	9.1	29 18.215	3.0842	− .0034	− .002	− 1 16 42.42	18.496	.166	− .15	2	23.30
10539	BD+38° 4817	B3	8.1	7.12	33 54.182	2.6753	+ .0143	− .0010	+39 1 24.20	18.647	.135	− .016	4	23.23
10540		A3			36 42.789	2.6280	+ .0163		+43 6 55.54	18.736	.129		2	22.26
10541	BD+ 6° 5048		9.0	8.6	22 36 52.688	+3.0183	+ .0006	− .006	+ 6 32 39.47	+18.741	+ .148	− .01	2	19.87
10542	BD+77° 870		10.2		40 50.72	0.9567	− .0512		+77 55 54.32	18.861	.039		2	20.37
10543	BD+38° 4858	K5	6.59	6.15	41 15.428	2.7110	+ .0152	+ .0025	+38 46 51.27	18.874	.125	− .022	4	23.23
10544	CD−26° 16319	G5	8.1	8.1	42 31.863	3.2953	− .0186	− .003	−26 43 19.16	18.911	.152	+ .01	2	19.33
10545	BD+ 9° 5103	G5	9.7		43 36.044	2.9957	+ .0025		+ 9 59 26.88	18.941	.138		2	19.90
10546	BD− 9° 6059	A5	9.6		22 43 52.806	+3.1401	− .0067	+ .003	− 8 47 26.25	+18.950	+ .141	+ .02	2	22.83
10547	CD−23° 17628	G5	9.7		45 46.119	3.2545	− .0156	− .005	−23 8 39.45	19.003	.143	− .08	2	20.37
10548	CD−28° 17970	K0	9.5		47 55.606	3.2980	− .0198	+ .005	−28 35 22.70	19.062	.141	+ .04	2	19.80
10549	BD+53° 3014		9.5		48 42.110	2.5194	+ .0229		+53 31 15.48	19.083	.104		2	19.79
10550	BD+21° 4847		9.1		50 1.962	2.9106	+ .0085	− .004	+21 58 59.81	19.118	.119	− .09	2	19.37
10551	BD−11° 5953	A0	8.2		22 52 37.795	+3.1458	− .0074	+ .0019	−10 41 24.34	+19.185	+ .124	+ .008	2	17.81
10552	BD+38° 4904	B3	6.07	6.0	53 58.814	2.7666	+ .0169	− .0005	+38 52 51.13	19.219	.106	− .005	4	23.23
10553	BD+29° 4828		9.2	9.1	22 55 42.124	2.8620	+ .0126	− .0053	+29 39 36.23	19.262	.108	− .007	2	19.67
10554	CD−22° 16192	F8	8.1		23 2 45.476	3.2105	− .0146	− .007	−22 39 5.58	19.424	.107	− .07	2	14.45
10555	BD− 0° 4498	F5	8.8		14 14.472	3.0722	− .0007	+ .004	+ 0 5 15.10	19.647	.080	− .03	2	25.35
10556	BD− 0° 4499		9.7		23 14 21.270	+3.0722	− .0007	+ .006	+ 0 4 58.50	+19.649	+ .080	+ .11	2	23.91
10557	BD+38° 4980	K2	8.2	7.22	15 54.346	2.8669	+ .0200	.0000	+38 51 5.44	19.675	.071	− .026	4	23.23
10558	BD−20° 6576	K0	9.9		16 3.445	3.1654	− .0119	− .015	−20 0 14.92	19.678	.080	− .02	2	19.80
10559	BD+51° 3591		9.7	8.9	18 2.650	2.7650	+ .0293		+51 40 12.43	19.710	.065		2	15.25
10560	BD+ 6° 5163		10.7		25 44.648	3.0475	+ .0036		+ 7 13 48.93	19.822	.058		2 3	25.38 25.55
10561	BD+38° 5023	K0	5.34	5.18	23 27 21.168	+2.9200	+ .0215	+ .0246	+38 47 47.62	+19.842	+ .052	− .083	4	23.23
10562	BD+41° 4803		9.7		27 30.614	2.9048	+ .0235		+41 38 53.30	19.844	.052		2	19.34
10563	BD+ 2° 4688	G5	9.7	9.1	32 59.390	3.0648	+ .0019		+ 2 53 37.53	19.906	.040		2	22.68
10564	CD−29° 18795	F5	10.0		36 6.304	3.1509	− .0171	+ .004	−29 21 5.17	19.936	.040	− .09	2	25.35
10565	BD−19° 6495	G5	10.6	ft.	37 25.661	3.1190	− .0102	− .009	−19 23 11.83	19.948	.036	− .16	2	19.80
10566	BD− 6° 6284	K5	9.9		23 42 21.224	+3.0838	− .0024	.000	− 6 10 1.68	+19.986	+ .026	− .01	2	19.81
10567	BD+13° 5171		10.7		43 40.811	3.0489	+ .0083		+14 2 40.63	19.994	.024		2	19.81
10568	BD+38° 5091 *br.*	F8	6.71	6.60	50 0.761	3.0258	+ .0246	+ .0054	+38 50 13.41	20.026	.011	+ .018	[illegible]	23.23
10569	BD− 8° 6213	G5	7.9	7.6	52 55.276	3.0784	− .0027	− .001	− 7 47 56.26	20.035	.006	− .03	2	23.27
10570	BD− 0° 4601	F8	9.5		56 21.736	3.0728	+ .0015	+ .006	− 0 14 29.37	20.043	+ .002		2	19.37
10571	BD−14° 6605		9.1	9.1	23 58 14.663	+3.0752	− .0056	+ .011	−13 51 53.12	+20.045	− .006	+ .04	2	19.38

10568. $12^{m}5$, $4''5$, 180°.

RIGHT ASCENSIONS AND DECLINATIONS

OF THE

2,438 STANDARD STARS

REDUCED WITH PROPER MOTIONS TO 1925.0

AND

COMPARED WITH OTHER CATALOGUES

STANDARD STARS 1925.0—COMPARISON WITH CATALOGUES

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
9989	0 0 4.904	+13 57 42.29	−0.040	+0.11				
10	1 9.456	+27 15 26.57	− .031	+ .32				
12	1 18.030	+44 48 42.84	+ .005	+ .01				
13	1 29.810	− 6 7 37.21	+ .037	+ .35	+0.041	+0.58	+0.061	−0.11
17	2 12.195	+40 0 3.97	− .003	+ .13				
22	0 2 59.984	−23 31 26.90	+ .015	+ .10				
27	3 53.563	− 2 57 58.33	+ .027	+ .42	+ .012	+ .19		
32	4 21.628	− 2 51 54.46	− .017	+ .24	− .017	+ .25	+ .023	− .31
[illegible]	4 30.377	+26 40 35.19	− .029	+ .32	− .040	+ .28	+ .037	+ .08
39	5 9.877	+58 44 10.11	+ .010	+ .29	− .013	+ .14	+ .076	− .08
41	0 5 27.858	+17 7 9.24	+ .009	+ .25				
46	6 24.910	+45 39 17.93	+ .043	+ .09	+ .013	+ .23	+ .074	− .04
48	6 33.271	+56 44 53.41	− .014	+ .12				
51	6 52.419	−12 59 47.20	+ .034	+ .18				
57	7 46.078	−28 13 2.64	− .010	+ .24	− .034	+ .46	+ .024	− .35
58	0 7 50.140	+65 42 33.03	+ .039	− .21				
59	7 55.486	−35 33 10.54			+ .068	+ .38	+ .073	− .65
65	9 22.265	+14 46 0.16	− .019	+ .20	− .008	+ .55	+ .034	− .04
79	11 6.894	+ 8 24 16.48	+ .018	+ .22	− .064	+ .35	+ .030	− .12
85	11 56.988	+76 32 2.75	+ .074	+ .31	− .027	.00	+ .101	− .02
87	0 12 6.198	+ 3 50 4.30	− .015	− .41				
94	13 1.418	+22 50 23.24	− .044	− .17				
95	13 9.994	+38 15 54.71	− .050	− .07	− .084	− .08	+ .020	− .52
100	14 4.249	+12 21 18.98	+ .019	− .29				
102	14 24.150	+36 22 10.52	− .078	+ .17	− .057	+ .54	− .016	− .26
103	0 14 42.949	+31 6 3.23	− .034	+ .40	− .113	+ .27		
104	14 44.492	+43 22 29.07	+ .030	− .09	− .080	+ .27		
105	14 50.272	− 8 27 59.60	− .003	+ .09				
114	15 36.414	− 9 14 22.50	+ .013	+ .19	+ .005	+ .25	+ .026	− .27
121	16 14.772	−18 6 59.72	− .005	+ .54				
125	0 16 44.173	+ 7 46 25.85	+ .009	+ .28	− .017	+ .14	+ .027	− .08
129	17 9.862	+37 33 11.76	− .048	+ .04	− .042	+ .41	+ .033	− .12
134	17 45.289	−29 23 46.59	+ .090	− .77	+ .011	− .43	+ .062	− .91
157	21 2.416	+52 37 52.97	+ .014	+ .10	− .049	+ .14		
162	21 33.417	+ 1 31 28.25	.000	− .05	+ .006	+ .45	+ .028	− .22
[illegible]	0 22 46.562	− 0 27 53.29	+ .031	+ .01	− .005	+ .25	+ .041	− .05
178	24 12.177	−12 4 24.27	− .023	+ .32				
180	24 12.722	−33 25 15.39			+ .011	+ .95		
181	24 18.705	+16 1 49.80	− .022	+ [illegible]	− .003	+ .42		
182	24 27.239	+ 9 46 45.42	− .012	− .06				
183	0 24 35.519	−20 44 51.20	+ .029	− [illegible]				
190	25 59.712	+64 20 4.66	− .038	+ .32				
191	26 9.610	+29 20 17.76	− .012	+ .15	− .022	+ .02		
192	26 12.690	− 4 22 17.16	+ .020	+ .52	+ .010	+ .60	+ .031	+ .28
195	26 37.770	−24 12 9.14	.000	−1.04	+ .025	− .19	+ .036	− .70
204	0 28 42.030	−38 25 49.57	− .045	+ .36				
205	28 43.952	+62 31 5.26	+ .066	+ [illegible]	− .033	+ .14	+ .135	+ .07
207	28 55.308	−25 46 21.32	+ .016	− .86				
213	29 58.603	−29 58 17.24	+ .009	− .47	+ .008	− .09		
227	31 23.216	− 4 0 19.93	+ .006	+ .28	+ .012	.00	+ .025	− .34
237	0 32 46.926	+53 29 3.96	−0.015	+0.46	−0.017	+0.37	+0.082	+0.20
240	32 52.120	+33 18 23.83	− .043	+ .18	− .078	+ .24	− .003	− .11
241	32 52.712	+14 49 9.01	+ .015	− .01	+ .032	+ .99		
244	33 29.667	−25 10 47.45	− .002	− .58	+ .025	− .09	+ .050	− .89
245	33 38.694	+ 2 43 26.42	− .036	+ .14	− .044	+ .68		
247	0 34 2.200	+82 4 48.19	− .177	+ .16	− .036	+ .07	+ .054	+ .22
249	34 35.217	+28 54 16.98	− .026	+ .12	− .037	− .10	+ .026	− .35
250	35 0.665	+48 56 33.02	+ .011	− .09	− .030	+ .19		
252	35 18.735	+30 27 2.70	− .045	+ .56	− .024	− .12	+ .061	− .15
255	35 27.468	+20 50 45.88	+ .011	+ .09	+ .004	+ .26		
258	0 36 14.361	+56 7 34.64	− .030	+ .20	− .018	+ .11	+ .050	− .27
262	36 42.875	−16 55 39.91	− .016	− .42				
263	36 53.238	− 4 45 47.83	− .017	− .52	+ .019	− .11		
286	39 49.559	−18 23 53.01	− .001	+ .10	+ .019	− .04	+ .023	− .26
285	39 49.845	+32 53 59.06	− .016	− .18				
289	0 40 32.181	+47 52 27.30	− .046	+ .50	− .043	+ .29	+ .026	+ .16
291	40 39.895	+74 34 42.11	+ .038	+ .08	+ .083	− .12	+ .088	+ .05
300	42 19.348	+59 9 53.71	+ .029	+ .38				
305	43 21.529	+23 51 33.84	− .027	+ .10	− .013	+ .01	+ .044	− .24
308	43 30.732	+ 6 19 54.52	− .043	+ .14	− .040	+ .01		
312	0 43 44.166	+25 52 55.59	− .046	− .01				
316	44 18.431	−22 7 53.57	− .030	− .80	+ .007	− .48		
317	44 26.819	+ 4 53 42.96	− .003	− .10	+ .034	+ .40	+ .016	− .07
318	44 32.915	+57 25 5.35	− .031	+ .56	− .137	+ .87	+ .048	+ .28
319	44 47.346	+ 7 10 37.72	− .011	+ .09	+ .001	− .06	+ .027	− .19
321	0 45 2.025	+16 32 9.74	− .032	+ .42	+ .062	+ .46		
326	45 39.569	−13 58 4.06	− .042	+ .07	− .013	− .10		
325	45 40.229	+40 40 14.96	+ .023	+ .17	+ .002	+ .58	+ .049	+ .21
331	46 4.433	− 0 37 56.74	− .023	+ .70				
332	46 6.500	+44 35 37.64	− .026	+ .24	+ .004	+ .78		
333	0 46 9.506	+63 50 22.23	− .015	+ .25	− .059	− .50	+ .051	− .21
337	46 22.252	−11 2 53.01	+ .071	− .30	+ .061	− .08	+ .058	− .62
357	49 10.419	− 1 33 4.31	− .003	+ .42	+ .025	+ .58	+ .025	− .02
358	49 20.629	+37 0 43.13	− .066	+ .56				
374	52 10.027	+60 18 39.49	+ .001	− .02	− .034	− .06	+ .062	− .18
375	0 52 12.870	+13 32 45.95	+ .008	+ .48				
376	52 17.389	−28 10 54.87	+ .027	− .32				
378	52 34.985	+38 5 34.46	− .035	+ .33	− .033	+ .56	+ .018	+ .09
382	53 46.309	+28 35 13.43	+ .032	− .24	− .017	+ .33	+ .081	− .10
384	.53 48.393	+ 1 22 47.84	− .014	− .38				
391	0 54 18.963	+20 59 57.81	− .015	− .13				
395	54 57.781	− 6 17 9.47	− .014	− .01				
396	54 59.621	−29 45 45.05	+ .006	− .39	+ .007	+ .26	+ .025	− .32
405	56 32.735	+68 57 17.68	+ .063	+ .09				
417	57 55.368	−16 40 1.64	+ .009	− .05				
416	0 58 11.051	+85 51 20.22	− .153	+ .03	− .209	− .09	− .150	− .09
422	58 51.670	−31 57 20.19			+ .021	− .07		
423	59 2.904	+ 7 29 12.05	− .003	+ .24	− .010	+ .04	+ .033	− .18
426	59 37.278	+52 6 3.48	− .032	+ .28				
430	0 59 57.324	+ 0 57 54.19	+ .004	.30	+ .005	− .49	+ .044	− .67

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Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
431	1 0 21.342	+29 15 31.84	−0.064	+0.15				
435	1 7.622	+14 32 35.53	+ .007	+ .41	+0.045	+1.15	+0.042	+0.03
447	2 29.866	−24 23 34.77	+ .041	+ .26				
436	2 36.592	+88 37 19.47	+ .341	.00	+ .472	− .29	+ .226	.00
451	3 16.030	+54 33 10.78	− .053	+ .48	− .008	− .25	− .009	− .13
456	1 3 51.957	+31 36 44.30	− .019	− .08	+ .002	+1.05		
457	3 55.513	+20 20 26.55	− .047	+ .24	− .031	+ .06		
459	3 59.901	−10 11 11.13	+ .009	+ .13	+ .015	+ .08		
461	4 26.411	+ 9 30 28.70	+ .004	− .29				
462	4 30.219	+ 5 15 11.93	− .009	− .13	− .010	+ .32	+ .018	− .30
467	1 4 48.989	−10 34 46.27	− .002	− .76	+ .011	− .12	+ .004	− .39
471	5 31.528	+35 13 24.07	− .066	+ .25	− .077	+ .32	− .006	.00
472	5 43.687	+79 16 31.20	− .114	+ .47	− .010	− .32	+ .003	+ .09
475	6 47.192	+64 37 13.59	+ .063	− .11	+ .024	+ .01		
477	6 49.314	+45 47 8.08	− .007	− .52				
482	1 7 25.096	+20 38 10.63	+ .016	+ .33	+ .094	− .88	+ .060	+ .05
483	7 31.403	+29 41 30.66	− .054	+ .53	− .055	+ .20	+ .002	− .10
490	9 1.164	− 7 10 50.77	− .006	+ .42	+ .007	+ .94		
497	9 48.633	+ 7 10 44.91	+ .006	+ .20	+ .051	+ .23	+ .048	− .18
503	10 37.305	− 8 19 32.05	− .008	+ .10	− .016	+ .76	+ .006	− .33
506	1 10 59.375	− 1 22 29.31	+ .072	− .26	+ .088	− .70		
518	12 59.732	+39 5 7.09	− .052	+ .24				
523	13 19.388	+44 14 12.88	+ .018	+ .17				
527	13 55.690	+ 3 13 11.45	− .026	+ .18	− .009	− .09	+ .017	− .57
539	15 20.341	+26 52 13.07	− .016	+ .48	− .003	+ .24	+ .029	+ .01
537	1 15 20.996	+57 50 16.43	− .029	− .09	− .072	− .03		
543	15 54.310	−25 20 33.50	+ .025	+ .78				
545	16 16.510	−16 12 20.43	+ .018	− .10				
549	16 58.207	+28 20 48.58	− .042	+ .42	− .005	+ .45	+ .025	.00
550	17 10.536	+21 58 53.79	− .036	+ .04				
552	1 17 21.569	+11 8 37.94	+ .019	+ .11				
554	17 54.889	+45 8 10.62	− .054	+ .16	− .088	+ .46	− .027	− .15
572	20 1.714	−31 20 10.48			+ .007	− .01		
574	20 16.442	− 8 34 11.99	.000	+ .41	+ .003	− .08	+ .019	− .31
577	20 36.641	+67 44 21.05	− .030	+ .22	− .016	− .22	+ .001	+ .15
581	1 20 53.575	+59 50 45.67	− .028	− .04	− .074	− .08	+ .019	− .41
582	20 59.981	− 3 14 19.10	+ .025	− .52				
591	22 34.811	+26 51 29.83	− .018	+ .29				
592	22 38.387	+18 51 8.21	+ .015	+ .39	− .006	+ .15		
596	23 9.516	−13 26 45.86	− .059	− .31	− .018	+ .15		
595	1 23 9.530	+45 1 12.19	− .019	+ .52	− .020	− .37	+ .035	+ .27
612	25 37.233	+69 52 45.55	+ .004	+ .06	− .013	− .37	+ .115	− .23
616	26 0.291	−22 1 0.72	− .023	− .36	− .010	+ .32		
617	26 10.227	−26 0 19.55	+ .035	− .44				
618	26 15.170	+ 5 45 27.88	− .008	− .06	+ .002	+ .37	+ .027	+ .06
627	1 27 28.004	+14 57 34.99	− .008	+ .59	− .010	+ .60	+ .034	+ .06
628	27 50.600	+34 24 51.45	− .028	− .07				
631	28 40.945	+54 33 35.53	− .013	+ .34				
641	29 56.375	− 7 24 29.40	+ .009	− .01				
650	31 45.596	+14 16 42.25	− .027	− .39	− .004	+ .02		
651	1 31 51.463	+48 20 25.23	− .052	+ .37	− .099	− .14		
658	32 19.488	−15 47 0.24	+ .013	− .29	− .021	+ .10		
660	32 23.210	+41 1 51.33	− .021	+ .48	+ .020	+ .13	+ .016	− .17
659	32 29.207	+72 39 30.82	+ .064	+ .48	− .015	− .14	+ .076	+ .08
665	33 7.187	+11 45 30.90	+ .012	+ .54	+ .043	+ .92	+ .048	+ .13
666	1 33 22.687	+48 14 56.00	− .020	+ .31	− .004	+ .22	+ .040	+ .11
668	33 51.558	+77 35 19.44	+ .131	− .12				
654	34 14.509	+88 54 11.04	+ .279	+ .13	+ .080	− .03	+ .078	− .03
676	34 30.599	+21 1 1.94	− .060	+ .21				
685	36 8.664	+40 11 52.10	+ .001	− .24	− .015	+ .13	+ .025	− .05
686	1 36 45.692	+67 39 52.11	+0.013	+0.28	+0.008	−0.06	+0.044	+0.03
694	37 31.553	+ 5 6 31.08	− .002	− .02	− .014	+ .36	+ .032	− .25
702	38 41.976	+44 56 41.64	− .057	+ .10				
703	38 45.570	−32 42 16.91			+ .005	+ .38		
705	38 55.907	− 4 4 2.84	− .018	+ .29	− .051	− .40		
704	1 38 56.904	+50 18 41.77	+ .004	+ .09	− .012	+ .43	+ .036	+ .06
715	40 35.015	−16 19 55.08	+ .010	− .18	− .015	+ .02	+ .032	− .27
721	41 25.815	+ 8 46 51.16	− .007	+ .31	− .002	+ .32	+ .019	− .29
725	42 8.036	−25 25 36.69	− .006	− .20	+ .010	+ .59	+ .026	− .20
726	42 18.129	+63 28 59.10	− .030	− .08	− .068	− .47		
729	1 42 32.945	−27 43 23.60	+ .049	− .91				
733	43 18.810	−14 15 48.17	+ .019	+ .03				
738	44 5.342	−21 13 5.83	+ .013	− .54				
737	44 6.614	+16 34 57.28	+ .007	− .24	+ .011	− .59		
747	45 0.868	+75 13 7.42	+ .065	+ .18				
750	1 45 14.305	+26 6 1.11	− .027	+ .49				
753	45 53.998	−11 3 24.72	− .043	− .03	− .007	− .52	+ .002	− .80
763	47 21.628	+80 32 28.13	+ .079	+ .17				
766	47 22.391	+50 25 22.24	− .056	+ .18	− .114	+ .41	− .025	− .03
768	47 45.459	−10 42 18.06	+ .007	+ .08	− .006	+ .04	+ .029	− .25
773	1 48 48.021	+29 12 50.77	− .036	.00	− .030	+ .07	+ .032	− .05
775	48 58.761	+63 18 5.85	+ .018	+ .78	− .048	+ .33	+ .051	+ .21
782	49 24.661	+18 55 35.99	+ .012	+ .17	− .001	+ .70	+ .088	− .26
784	49 40.232	+ 2 49 4.71	− .013	+ .72	− .010	+ .48	+ .023	− .18
785	50 8.813	+68 19 4.08	− .022	+ .61	+ .029	+ .12		
788	1 50 24.453	+ 8 24 45.16	+ .025	+ .16				
789	50 29.547	+20 26 31.50	− .039	+ .50	− .013	+ .42	+ .021	+ .02
806	53 44.370	+30 46 12.00	− .031	+ .04				
807	53 44.642	+23 13 51.57	− .053	+ .46	− .021	+ .59	+ .019	+ .04
813	55 8.191	−33 25 52.12						
817	1 55 24.750	+11 55 54.08	.000	+ .33	+ .006	+ .08		
818	55 32.728	+59 35 47.93	− .015	+ .57				
820	56 14.935	+ 2 44 20.48	− .016	+ .32	− .014	+ .20		
821	56 28.263	−21 26 26.18	− .009	+ .25	− .019	+ .40	+ .019	− .07
823	56 43.455	− 8 53 11.27	+ .013	− .47	+ .037	+ .22		
824	1 56 59.620	+72 3 33.65	+ .017	− .15	− .019	− .14	+ .031	− .40
827	57 17.636	+54 7 32.78	− .007	+ .24	− .046	− .46		
829	57 25.833	+64 1 43.12	+ .023	− .04	− .042	− .27	+ .082	− .06
837	58 9.952	+ 2 24 7.63	+ .054	+ .07	+ .064	+ .42	+ .173	− .26
842	59 17.267	+41 58 14.17	+ .049	+ .08	+ .025	+ .25	+ .062	− .16
844	1 59 20.771	− 0 13 56.70	+ .001	+ .48	+ .003	+ .11		
847	1 59 23.973	−24 14 48.01	− .019	+ .32				
854	2 0 19.601	−17 52 23.60	− .005	− .59				
867	2 56.432	+23 6 30.78	− .031	+ .46	− .011	+ .28	+ .027	.00
870	3 57.207	+37 30 14.87	− .029	+ .14	− .014	+ .25		
879	2 4 45.426	−27 55 37.75	− .032	+ .05				
883	5 4.393	+34 37 59.92	− .042	+ .16	− .060	+ .40	+ .006	− .10
875	5 5.113	+83 12 39.73	+ .043	− .[illegible]				
892	6 27.866	+19 8 50.29	− .038	+ .37	− .030	+ .36	+ .006	− .07
895	7 7.518	−13 16 47.49	− .017	− .68				
896	2 7 23.339	+ 8 13 9.82	− .019	+ .37	− .010	+ .37		
899	8 0.827	+29 57 8.72	− .009	+ .47	− .002	+ .65		
904	8 30.510	+43 52 50.50	+ .003	+ .25	− .063	− .12		
903	8 34.388	+66 10 26.28	+ .011	+ .28	− .019	.00	+ .055	+ .19
905	8 36.318	+50 43 5.84	− .036	+ .12	− .012	+ .14	+ .048	− .15
911	2 9 1.300	+ 8 29 44.49	− .015	+ .36	+ .001	+ .45	+ .026	− .18
913	9 36.372	−31 4 30.40			+ .001	+ .15	+ .059	− .63
927	11 27.150	+24 41 46.54	− .017	+ .44	− .046	+ .55		
933	12 28.124	+33 52 54.65	− .069	+ .11	− .030	+ .53		
937	12 50.932	+33 30 4.34	− .020	+ .20	+ .002	+ .47	+ .037	− .01

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
938	2 13 14.485	−6 46 1.20	−0.002	+0.45	+0.009	+0.57	+0.033	+0.04
[illegible]	13 56.971	+19 33 18.24	+.006	+.37	+.010	+.73	+.046	+.15
944	14 2.284	+13 5 3.08	+.019	+.77				
945	14 7.520	+1 24 14.51	−.016	+.[illegible]	−.003	+.74		
947	14 25.794	+47 2 5.39	−.020	−.14	−.039	+.61		
958	2 15 33.343	−3 19 2.93	−.008	−.01	−.018	+.23	+.030	−.42
976	18 23.050	−1 13 32.32	+.057	+.57	+.067	+.28		
[illegible]	18 32.946	−18 0 10.24	+.022	−.38				
986	19 6.667	−24 9 23.26	+.004	−.52	+.009	+.26	+.074	+.05
993	20 47.646	+10 16 18.39	−.001	+.45	+.036	+.30	+.067	−.13
[illegible]	2 20 57.921	−26 11 13.94	−.007	+.27				
1001	22 19.569	−12 37 40.90	+.020	+.02	+.050	+.33	+.057	−.23
1004	22 51.623	+67 3 59.26	+.022	+.24	−.128	+.15	+.016	−.08
1009	23 6.030	−20 22 54.45	−.029	−.33				
1013	23 45.760	+29 20 7.22	−.051	−.21	−.037	+.01		
1018	2 24 10.103	+8 7 29.00	−.008	+.42	−.004	+.24	+.031	−.12
1026	25 21.576	−31 26 12.08						
1027	25 34.853	+9 13 53.92	+.009	+.13				
1032	26 25.769	+19 31 23.50	−.051	+.48	+.014	+.16		
1037	26 44.[illegible]	+17 22 22.82	−.028	+.60	−.026	+1.19	+.045	+..04
1039	2 27 31.087	+35 48 56.05	+.015	+.57	+.027	+1.03		
1049	28 31.[illegible]	−15 34 23.57	−.028	−.01	+.010	−.27	+.027	−.38
[illegible]	29 59.371	−34 58 45.25			+.004	+.19	+.019	−.24
1059	30 22.709	+11 16 36.29	−.009	+.31				
1062	30 51.772	+72 29 29.97	+.051	+.15	−.053	−.11	+.059	−.16
1065	2 31 38.271	+51 38 5.33	−.018	+.31	−.042	+.59		
1070	31 56.133	+5 16 0.32	−.012	+.26	−.005	+.49	+.030	−.25
1071	31 57.931	+6 31 47.13	+.025	−.05	+.016	+.07	+.042	−.30
1074	32 18.446	−8 9 25.53	−.001	+.67	−.009	+.65		
1086	34 8.678	+62 16 45.21	−.028	+.06				
1088	2 34 33.184	+21 38 16.61	+.016	+.54	+.006	+.42	+.039	−.27
1091	35 38.159	+0 0 20.83	+.005	+.33	−.005	+.11	+.023	−.33
1094	35 56.103	−12 11 23.43	−.009	+.04	−.028	+.18	+.030	−.15
1095	36 4.120	+58 39 22.79	−.029	+.04				
1103	36 28.960	−16 37 49.39	−.021	−.86				
1102	2 36 51.235	+81 7 58.34	+.009	−.07	−.027	−.18	+.077	−.01
1110	37 30.387	+39 52 39.69	−.047	+.05	−.020	+.23	.000	−.12
1112	37 59.270	+47 56 45.83	−.008	+.32				
1114	38 20.856	+67 30 26.21	+.014	−.04	.000	−.07	+.024	.00
1118	39 2.682	+27 23 20.30	−.053	+.04	−.017	+.53	+.011	+.23
1117	2 39 3.978	+48 54 44.66	−.011	+.01	−.010	+.62	+.017	+.25
1119	39 11.567	+43 58 44.99	+.002	−.12	+.055	−.14		
1124	39 24.744	+2 55 14.09	+.007	+.30	+.017	+.43	+.035	−.13
1130	39 41.272	−2 50 59.24	−.008	−.10				
1132	40 33.120	−14 10 32.19	−.001	−.67	−.020	+.06	+.009	−.09
1133	2 40 53.078	+9 47 54.20	−.001	−.06	−.004	+.18	+.031	−.01
1134	40 54.555	−25 48 47.90	−.008	−.44				
1139	42 7.994	+69 19 12.94	+.055	+.46				
1140	42 19.808	+35 40 9.27	−.014	−.15				
1148	43 20.607	−21 57 14.11	+.002	−.46				
1149	2 43 26.243	+28 56 11.65	−.022	+.07	−.007	+.31	+.055	−.19
1157	44 19.543	+17 58 19.94	−.003	+.24	+.011	+.23		
1158	44 20.295	−12 46 20.38	−.018	+.27				
1162	45 12.678	+55 35 7.48	−.026	+.31	−.070	+.32	+.036	−.28
1163	45 33.817	+20 57 8.71	−.016	+.43	−.021	+.39	+.032	+.34
1168	2 45 57.104	−32 43 13.19					+.050	−.69
1174	47 20.889	+14 46 26.41	−.013	+.52	−.012	+.79	+.041	+.11
1180	47 38.154	−21 18 44.68	−.021	−.61	−.007	−.17	+.028	−.26
1186	48 45.732	−31 7 27.74			+.010	+.33		
1188	48 55.662	+52 27 24.32	−.039	+.27	−.039	+.37	+.002	+.13

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
1199	2 50 52.410	+72 22 16.47	+0.067	+0.40				
1200	50 54.741	−5 38 5.42	+.026	+.70				
1206	51 31.923	+14 24 13.54	−.016	+.40				
1213	52 12.892	+8 4 50.59	−.007	−.07	−0.013	+0.48		
1217	52 45.738	−9 11 44.93	−.021	−.45	−.007	+.07	+0.043	−0.32
1219	2 53 8.677	+4 11 56.15	−.018	+.27				
1222	53 47.353	+20 22 8.02	−.028	+.55	+.012	+.27		
1223	53 57.445	+39 21 49.28	−.039	+.30	−.078	+.96		
1230	54 55.096	+21 2 28.81	−.044	+.49	−.045	+.35	+.008	−.05
1238	55 41.514	+8 36 34.26	−.047	+.87	−.051	+.20	+.015	+.28
1241	2 55 54.851	−29 12 16.30	−.095	−.03				
1237	56 2.595	+79 7 28.07	+.096	+.12	+.122	−.25	+.103	+.02
1255	58 21.392	+3 47 47.22	−.010	+.36	+.007	+.42	+.024	−.05
1258	58 35.758	−18 30 7.00	+.037	−.37				
1263	59 5.118	−23 55 3.95	+.042	+.51	+.016	−.24	+.062	−.39
1265	2 59 21.135	+53 12 50.26	+.017	+.38	−.014	+.31	+.066	−.18
1268	3 0 21.757	+38 33 2.85	−.031	+.46	−.047	+.31	+.006	−.01
1283	3 16.873	+40 40 4.26	−.014	−.05	−.019	+.36	+.034	−.09
1287	3 24.829	−2 5 27.12	+.028	+.01				
1288	3 38.596	+49 19 41.15	−.030	−.07	−.024	+.35	+.041	−.22
1290	3 3 46.047	−14 2 39.80	−.018	+.18				
1291	4 5.808	+18 30 29.88	−.014	+.97	+.031	+.80		
1297	5 5.658	+28 47 30.27	−.032	−.05	−.090	+1.12		
1300	5 32.304	+52 51 33.04	−.024	+.51				
1308	6 15.330	+31 56 34.15	−.055	+.52				
1312	3 7 11.895	+42 5 37.71	−.066	−.02				
1313	7 14.484	+47 26 43.24	−.009	+.77				
1315	7 17.870	−20 23 42.52	+.032	+.60				
1314	7 20.164	+19 26 38.77	−.019	+.67	−.017	+.22	+.022	−.04
1323	8 27.418	+6 22 45.54	+.036	−.13	+.117	+.72		
1329	3 8 53.087	−29 16 55.19			+.006	−.21	+.027	−.55
1330	8 56.643	−1 28 32.39	−.019	+.13	−.045	−.10	+.026	+.10
1335	10 2.362	+56 51 44.88	+.006	+.11	−.042	−.07		
1340	10 35.168	+20 46 3.38	−.026	+.79	−.020	+.43	+.034	+.02
1339	10 44.558	+77 27 41.19	+.109	+.15	+.084	−.34	+.052	−.03
1347	3 11 43.124	−35 50 10.04			−.007	−1.12		
1348	12 11.337	−9 5 50.79	−.014	+.06	−.005	+.23	+.039	−.25
1353	12 53.648	+39 0 32.30	−.019	+.54				
1359	13 50.696	−31 37 35.36						
1361	14 7.532	+12 33 1.41	−.004	+.26				
1357	3 14 15.306	+84 38 59.93	+.073	+.34	+.196	+.39	+.016	+.31
1368	15 15.677	−18 49 52.11	+.032	−.36	+.071	−1.07		
1369	15 25.524	+3 5 46.31	+.005	+.36	+.005	+.49	+.053	+.17
1377	16 10.837	−22 1 48.48	+.035	−.20	+.035	−.44	+.069	−.57
1381	16 53.530	+20 52 40.16	−.053	+.64	−.047	+.56	−.006	+.19
1388	3 18 8.645	+64 19 10.47	+.006	+.21	−.104	−.69		
1394	18 57.453	+49 35 44.38	−.058	+.43	−.057	+.55	−.014	+.14
1395	19 2.839	−25 51 19.77	+.031	−1.02	−.006	−.91		
1402	20 46.456	+8 45 57.44	+.001	+.19	−.017	+.36	+.027	−.20
1406	21 25.124	−4 44 35.91	−.021	+.93				
1414	3 22 58.729	+59 40 49.92	−.087	+.82	−.118	+.30	−.030	+.36
1416	23 6.091	+9 28 20.26	+.004	+.01	−.012	+.67	+.032	−.31
1420	23 41.786	+20 12 14.90	−.012	+.64				
1423	24 10.301	+30 6 58.76	+.015	+.65				
1425	24 26.274	−11 32 42.91	−.002	+.47	−.054	+.73		
1432	3 25 16.641	+47 44 15.92	−.025	+.33	−.024	+.53	+.035	+.39
1440	26 18.319	+11 4 48.58	−.021	+.09	−.041	+.14	+.030	−.36
1441	26 18.608	−23 44 1.94	−.033	−.74				
1444	26 43.741	+12 40 50.69	−.013	+.24	−.007	+.46	+.027	−.17
1448	26 53.668	−5 19 52.58	−.001	+.77	+.025	+.39	+.034	+.04

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
1453	3 27 53.074	+35 12 28.19	−0.052	+0.10	−0.053	+0.41		
1459	28 32.284	+ 9 7 15.84	− .002	+ .66	− .014	+ .11		
1467	29 23.731	− 9 42 40.30	− .027	− .05	− .030	+ .39	+0.020	−0.14
1474	30 28.445	−21 53 1.00	− .013	− .43	− .038	− .32	+ .031	− .43
1491	32 33.146	+22 57 50.68	− .020	− .04	− .018	+ .80		
1493	3 32 52.311	−17 42 52.43	− .007	− .26	− .015	+ .07		
1494	32 56.264	+ 0 20 38.28	+ .008	− .07	− .024	− .71		
1495	33 2.605	+ 0 9 53.44	− .014	+ .51	.000	+ .77	+ .042	+ .49
1505	35 6.494	+13 38 59.68	− .032	+ .60				
1507	35 18.867	− 5 51 56.45	+ .016	+ .27	+ .010	+ .04		
1508	3 35 37.782	+62 58 31.03	+ .020	− .06	− .040	+ .02	+ .028	+ .11
1509	35 40.398	−28 11 14.01			− .005	+ .11		
1510	35 54.559	+40 56 42.62	− .003	+ .70				
1511	36 17.253	+25 5 17.07	− .010	+ .28	− .022	+ .19	+ .030	− .20
1516	37 34.598	+47 32 57.05	+ .038	+ .25	+ .009	+ .17	+ .049	+ .01
1526	3 38 53.770	+66 58 5.39	+ .080	+ .20	− .021	− .31		
1530	39 15.916	−32 10 38.44			+ .048	− .21	+ .097	− .96
1529	39 24.892	+45 51 49.65	− .011	+ .01				
1533	39 36.609	+32 3 6.66	− .019	+ .05	− .020	+ .65	+ .029	− .32
1535	39 39.238	−10 0 58.72	− .006	+ .17	− .017	+ .23	+ .019	.00
1534	3 39 39.790	+36 13 28.49	− .060	+ .54	− .043	+ .41		
1537	39 58.790	−10 43 19.52	− .018	+ .83	+ .008	+ .03		
1536	40 1.933	+54 49 45.63	− .032	+ .67				
1539	40 3.366	+27 39 46.75	− .027	+ .32				
1538	40 5.477	+42 20 35.01	+ .014	+ .39	− .022	+ .29	+ .036	+ .23
1541	3 40 25.042	+23 52 43.59	.000	+ .58	− .017	+ .59	+ .031	+ .11
1542	40 41.825	− 1 23 55.02	+ .014	+ .30	− .032	+ .54	+ .045	− .04
1552	42 23.316	−26 8 56.67	+ .009	− .97				
1551	42 24.738	+71 6 11.50	+ .037	− .37	− .041	− .38	+ .039	− .19
1543	42 25.436	+86 24 46.07	− .039	− .13	+ .126	− .05	+ .198	+ .03
1556	3 43 1.316	+23 52 28.24	− .019	+ .42	− .017	+ .65	+ .031	+ .28
1562	43 37.222	−23 28 13.41	− .036	+ .31	+ .007	+ .01	+ .024	− .25
1568	44 26.071	−24 6 22.90	− .008	− .76	+ .003	− .74	+ .044	− .91
1570	44 41.877	+23 49 31.08	− .031	+ .26	− .046	+ .48	+ .011	+ .20
1571	44 47.945	− 0 0 5.45	+ .041	+ .19				
1576	3 45 17.532	−21 7 54.35	− .027	− .03				
1592	47 37.169	+57 45 13.79	− .015	+ .30	− .113	− .37		
1595	48 0.109	+ 6 18 37.71	− .013	− .62	− .005	+ .10		
1603	48 52.500	+17 6 17.49	+ .008	+ .38	− .008	+ .45		
1605	49 24.743	+31 39 44.13	− .003	+ .34	− .039	+ .73	+ .041	+ .33
1607	3 49 27.862	− 6 51 22.09	− .008	− .17				
1610	49 50.848	−18 39 23.44	+ .018	− .09				
1616	50 41.461	+30 49 34.52	− .028	+ .12				
1615	50 43.669	+60 53 27.26	+ .018	+ .07	− .028	+ .40	+ .043	− .12
1621	50 47.464	−34 57 12.57			+ .011	− .02	+ .090	−1.15
1627	3 52 42.571	+ 2 50 26.54	+ .024	+ .17				
1628	52 48.865	+39 47 40.81	− .013	+ .50	− .045	+ .45	+ .016	+ .03
1629	52 57.043	+24 14 44.42	− .044	− .07				
1637	54 5.553	+35 34 36.35	− .017	+ .20	− .072	+ .86	+ .019	+ .04
1645	54 31.748	−13 43 15.41	− .001	+ .08	− .024	+ .10	+ .030	− .31
1648	3 55 7.961	+13 45 46.92	− .013	+ .21				
1657	56 31.312	+12 16 46.61	− .012	+ .39	− .031	+ .41	+ .013	+ .02
1663	58 17.060	+73 47 50.26	+ .044	+ .24				
1670	59 9.851	+ 5 46 56.64	+ .001	+ .27	− .009	+ .59	+ .031	− .21
1673	3 59 33.155	+61 53 51.32	+ .006	− .06				
1680	4 0 15.440	+21 52 41.67	− .017	+ .23	− .026	+ .54	+ .034	− .06
1683	0 52.105	−12 59 50.80	+ .022	+ .09	+ .003	− .02		
1682	0 59.291	+50 8 57.30	− .016	+ .34	− .043	+ .06	+ .066	− .10
1695	2 21.961	+28 47 59.21	− .028	+ .08	− .044	+ .16	+ .018	+ .07
1697	2 31.882	−27 51 22.19	− .103	− .62	− .037	+ .14	+ .025	− .21
1699	4 3 0.192	+42 59 30.05	−0.018	+0.01				
1702	3 12.535	+47 30 49.80	− .031	+ .[illegible]	−0.046	+0.27	+0.027	+0.15
1703	3 36.342	+37 50 41.62	+ .003	+ .60	+ .027	+ .72		
1704	3 43.184	−22 11 39.27	− .019	+ .50				
1709	4 47.599	+19 24 43.73	− .011	+ .45	− .005	+ .79	+ .038	− .14
1720	4 6 4.236	− 3 46 11.39	+ .003	− .10				
1723	6 15.542	+26 17 11.02	− .020	− .22	− .043	− .11	+ .[illegible]	− .58
1728	7 20.564	+ 5 19 44.62	− .004	+ .33	+ .010	+ .28		
1734	8 7.960	+48 54 10.00	− .050	+ .33				
1735	8 12.172	− 7 1 55.50	+ .007	+ .49	− .011	+ .30	+ .030	− .24
1738	4 8 37.479	−17 27 57.65	+ .048	− .44				
1743	9 22.972	+48 13 13.33	− .052	+ .36	− .035	+ .63	+ .017	+ .19
1745	10 38.831	+83 37 48.38	− .007	+ .12	− .129	+ .04	+ .275	− .06
1752	10 49.552	−10 26 29.65	− .001	+ .21	+ .033	− .30	+ .056	− .45
1751	10 51.502	+53 25 30.81	+ .012	+ .56	− .059	+ .78		
1758	4 11 27.576	+ 8 42 20.76	+ .044	+ .23	− .017	+ .29	+ .056	+ .37
1762	11 49.172	− 7 46 6.97	+ .013	+ .29	− .020	+ .45	+ .033	− .03
1755	12 24.215	+85 21 23.18	+ .265	+ .07	+ .035	− .20	− .073	− .04
1773	13 56.712	+21 23 50.08	+ .013	+ .41	− .011	+ .45		
1780	15 3.347	−33 58 50.83			+ .007	− .56	+ .054	−1.09
1784	4 15 31.331	+15 26 52.09	− .014	+ .49	− .029	+ .48	+ .034	− .01
1783	15 32.111	+34 23 13.57	− .027	+ .72	− .020	+ .75	+ .003	+ .34
1789	16 20.924	+14 55 0.72	− .009	+ .21	− .030	+ .80		
1793	16 45.306	−16 36 58.04	+ .021	− .09				
1794	17 4.520	− 7 46 14.69	+ .004	+ .10	− .055	− .27		
1798	4 17 22.653	−20 49 3.06	− .023	+ .10	− .050	+ .18	+ .022	+ .15
1804	18 24.442	−25 54 14.07	− .042	+ .11				
1805	18 36.384	+17 22 4.34	− .027	+ .70	− .031	+ .38	+ .024	− .10
1812	19 56.703	− 3 55 3.92	+ .062	+ .57	+ .012	− .05		
1818	20 22.570	−35 43 7.63			− .008	− .53		
1821	4 20 46.577	+57 24 55.82	+ .005	− .02				
1825	21 8.868	+17 45 27.68	+ .026	+ .25	+ .036	− .11	+ .049	− .02
1827	21 13.113	−34 11 24.45			− .018	+ .11	+ .058	− .21
1828	21 58.118	+69 12 44.53	+ .024	− .16				
1832	22 16.847	+ 8 25 15.95	− .010	+ .07				
1836	4 23 6.571	+ 1 54 44.40	− .049	− .15				
1848	24 14.047	+19 0 55.48	− .016	+ .58	− .040	+ .41	+ .030	+ .03
1852	24 41.387	−21 40 9.40						
1850	24 41.684	+27 14 23.91	− .015	+ .17				
1859	25 37.908	−13 12 45.59	+ .043	− .02	+ .004	− .05		
1860	4 25 51.837	+15 28 30.74	+ .011	− .21	− .028	− .83	+ .038	− .70
1861	26 4.885	+53 44 58.37	+ .027	+ .21	− .041	+ .39	+ .087	+ .38
1864	26 22.023	+15 31 48.28	− .016	+ .14	− .031	+ .72		
1869	27 16.854	+36 52 59.48	− .019	+ .31				
1878	28 7.918	+42 54 19.23	− .001	+ .14	− .023	+ .50	− .010	+ .22
1888	4 29 35.338	+14 41 17.30	− .023	+ .89	− .049	+ .66	+ .005	+ .37
1899	31 36.875	+16 21 35.32	− .046	+ .47	− .031	+ .35	+ .029	+ .04
1906	32 34.212	− 3 30 16.58	+ .016	+ .53	+ .004	+ .44	+ .049	+ .17
1907	32 38.063	−30 42 54.03			+ .041	− .32	+ .088	− .17
1910	33 21.640	+ 0 50 51.03	+ .003	+ .25	− .013	+ .69		
1916	4 33 49.547	− 2 37 20.19	+ .020	+ .55	− .006	− .05		
1915	33 50.172	+20 32 7.50	− .038	+ .65	− .064	+ .01		
1918	33 56.202	−30 52 3.80						
1924	34 43.932	−17 57 54.20	+ .045	− .85				
1925	34 44.649	−14 26 58.88	− .046	− .22	− .010	− .11	− .009	− .62
1926	4 35 34.376	+76 28 20.49	+ .102	+ .08				
1935	35 52.691	+12 3 5.55	− .016	+ .23	− .087	+1.31		
1940	37 9.592	−19 48 51.84	− .002	+ .17	− .018	+ .13	+ .030	+ .19
1942	37 34.767	+43 13 25.85	− .027	+ .46	− .046	+ .15		
1943	37 39.173	+49 49 55.48	− .004	− .20	− .037	+ .34		

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
1944	4 37 44.420	+22 48 52.01	−0.009	+0.29	−0.047	+0.70	+0.022	+0.02
1948	38 42.705	+75 48 27.70	+ .085	+ .48	+ .063	+ .10	+ .084	+ .19
1953	38 57.121	+32 43 32.79	− .019	+ .34				
1962	40 29.007	− 8 38 33.28	+ .006	+ .47	− .005	+ .67		
1968	41 14.196	−27 42 55.75						
1969	4 41 44.878	+56 37 33.16	− .031	+ .21	− .018	+ .32	+ .010	+ .24
1970	41 45.044	− 3 23 27.40	+ .001	+ .65	− .032	+ .28	+ .028	+ .11
1975	41 50.573	−21 25 11.77	+ .003	+ .35				
1973	41 57.514	+55 28 13.69	+ .012	+ .28				
1984	43 3.046	−34 8 26.67			+ .027	− .07		
1988	4 43 26.061	−28 13 20.56	+ .009	− .60	+ .015	− .53	+ .050	− .92
1990	43 37.924	+29 38 27.83	− .022	+ .25				
2002	45 46.004	+ 6 49 53.75	− .023	+ .04	− .046	+ .11	+ .019	− .07
2001	46 14.757	+81 4 25.26	+ .118	+ .32	+ .045	− .05	+ .060	+ .08
2005	46 15.796	−13 53 43.06	− .011	− .18				
2006	4 46 34.853	+66 13 3.17	− .022	+ .10	− .069	+ .17	− .007	− .02
2009	46 48.715	−16 20 47.19	− .022	+ .15	− .025	+ .12	+ .036	+ .17
2007	46 53.437	+61 21 27.26	− .017	− .18				
2011	46 59.051	+18 42 48.61	+ .015	+ .53	− .021	+ .02	+ .037	− .20
2013	47 12.540	+ 5 28 40.97	− .053	− .02	− .050	+ .48	−.003	− .44
2021	4 48 17.243	+14 7 36.94	− .020	+ .13	− .029	+ .15	+ .037	+ .15
2031	50 20.584	+ 2 19 8.61	+ .001	+ .41	− .006	+ .29	+ .039	− .25
2034	50 44.355	+ 7 39 31.59	− .010	− .54	− .016	− .50		
2043	51 56.457	−16 32 16.77	− .038	+ .06	− .019	− .45		
2044	52 6.335	+33 2 56.02	− .036	+ .48	− .063	+ .86	+ .014	+ .16
2046	4 52 42.484	− 5 17 20.37	+ .003	− .07	+ .004	− .56		
2051	53 15.434	+23 49 58.58	− .033	+ .90	− .018	+1.34		
2055	53 33.806	+24 56 9.95	− .031	+ .62	− .052	+1.01	+ .034	+ .26
2060	54 9.683	+37 46 42.51	− .021	+ .63	− .064	+ .67		
2065	54 39.588	+ 1 36 0.29	+ .008	+ .41	+ .009	+ .14		
2066	4 54 43.940	+14 25 47.16	− .011	+ .55				
2076	56 34.936	+43 42 50.27	− .044	+ .14	− .056	+ .45	− .005	− .17
2077	56 44.277	+60 20 4.55	− .022	− .23	− .077	− .24	+ .005	− .14
2082	57 13.887	+40 58 4.41	− .023	− .08	− .019	+ .27	+ .005	− .19
2085	58 2.746	+41 20 5.55	− .019	+ .26				
2090	4 58 36.610	+21 29 3.20	− .013	− .01	− .031	+ .32	+ .041	+ .03
2093	59 6.774	−26 22 49.78	+ .013	− .07	− .020	+ .46		
2098	59 32.484	−31 52 47.05			+ .056	+ .32		
2097	4 59 36.850	+58 52 10.04	− .046	− .19	− .015	− .14		
2106	5 0 16.877	+15 18 3.74	+ .005	+ .43	− .041	+ .59	+ .041	+ .31
2107	5 0 46.749	−24 29 29.24	− .004	− .49	− .065	−1.51		
2113	1 9.244	− 3 8 32.61	− .006	+ .47				
2111	1 12.540	+33 49 2.66	− .008	+ .11				
2112	1 15.065	+41 8 4.20	− .014	− .50	− .048	− .21	+ .004	− .57
2116	2 17.136	−22 28 14.58	− .003	− .02	− .012	+ .03	+ .057	+ .10
2117	5 2 53.743	+73 51 9.58	+ .083	− .31	− .106	− .05		
2127	3 55.418	−12 35 13.84	− .002	+ .01				
2140	4 9.682	− 5 10 56.21	+ .023	− .26	− .037	+ .01	+ .025	− .20
2132	4 24.736	+19 45 49.67	− .014	+ .61	+ .025	+ .28		
2124	5 0.136	+85 51 52.61	− .210	− .01	− .044	− .41	− .039	− .10
2135	5 5 2.388	+27 56 11.64	− .043	+ .03				
2137	5 7.[illegible]	+46 52 15.97	− .046	+ .23	− .023	+ .69		
2138	5 11.[illegible]	+ 9 44 3.92	− .020	− .18	− .072	+ .13		
2142	5 33.967	− 8 50 56.96	− .011	+ .16	− .015	+ .43	+ .035	− .11
2146	6 21.515	+67 23 35.17	+ .049	− .03				
2158	5 8 17.554	+38 23 49.87	− .005	+ .11	− .035	− .09	+ .008	+ .04
2165	9 33.706	−16 17 35.52	− .002	+ .21	− .007	+ .26	+ .079	+ .02
2169	9 56.867	− 8 14 5.91	− .034	+ .41	− .041	+1.17		
2166	10 9.914	+79 8 55.71	+ .034	+ .29	+ .042	+ .21	+ .054	+ .04
2174	10 55.963	− 8 17 13.87	− .012	− .15	− .013	+ .08	+ .035	− .19
2175	5 11 8.734	+45 55 24.55	+0.044	+0.15	+0.001	+0.32	+0.034	−0.09
2191	13 51.729	+40 2 2.51	− .051	− .02	− .039	− .08	− .010	− .04
2195	13 57.829	− 6 55 27.38	− .009	+ .45	− .006	+ .28	+ .037	− .03
2200	14 46.113	+22 1 12.57	− .003	− .03	− .073	− .03		
2201	14 46.708	−34 58 4.33			− .027	+ .10	+ .030	− .61
2203	5 15 10.111	+54 10 34.79	− .024	− .08				
2204	15 16.428	+ 2 31 9.57	+ .006	+ .42	− .002	+ .98		
2206	15 30.248	−18 12 32.40	+ .019	+ .22				
2212	16 7.119	−13 15 11.19	− .019	+ .17	− .055	− .29	+ .016	+ .04
2214	16 15.074	+10 48 55.37	+ .015	+ .13				
2216	5 16 24.295	−27 26 42.14	+ .030	− .94	+ .012	+ .27	+ .071	− .34
2224	17 38.493	+ 8 21 20.22	+ .035	+ .62	− .045	+ .56		
2229	17 55.959	− 0 27 18.75	+ .011	+ .61	+ .020	+ .60	+ .061	+ .20
2219	18 14.229	+85 36 55.50	− .016	− .21				
2231	18 21.793	+70 9 39.47	.000	+ .12				
2236	5 19 33.145	+37 19 0.92	− .032	+ .53	− .019	+1.35		
2247	20 11.143	−26 46 31.54	+ .020	+ .72				
2250	20 42.312	− 2 27 53.98	− .003	− .18	− .031	− .02	+ .067	+ .04
2251	20 51.161	+ 1 46 44.12	− .006	+ .61	+ .007	+1.07	+ .053	− .08
2254	21 6.437	+ 6 16 58.88	− .008	+ .45	− .017	+ .52	+ .042	− .14
2256	5 21 32.927	+28 32 44.19	− .041	− .05	− .050	+ .30	+ .020	+ .17
2263	22 47.444	+17 53 56.80	− .046	+ .46	− .054	− .66		
2265	23 4.844	+63 0 24.40	+ .059	+ .23	− .068	− .03	+ .030	− .15
2268	23 35.083	−11 57 46.33	− .007	+ .39	− .056	+ .65		
2272	24 24.742	−21 26 17.47	+ .002	− .22				
2274	5 24 35.228	− 0 2 25.03	− .029	+ .13				
2277	24 54.596	+29 7 40.56	− .024	− .18				
2280	25 1.875	−20 49 5.75	− .054	− .22	− .045	+ .20	+ .067	− .30
2283	25 30.487	+41 24 17.88	+ .003	+ .26				
2288	26 13.847	−30 10 32.54						
2298	5 27 50.599	+32 8 17.35	− .057	+ .41	− .091	+1.03	− .021	+ .09
2302	28 10.438	− 0 21 12.39	− .017	− .05	− .020	+ .29	+ .033	− .16
2305	28 32.909	−35 31 28.55			− .090	+ .96	− .007	+ .08
2315	29 25.295	−17 52 29.81	− .015	− .09	− .022	+ .03	+ .036	− .33
2311	29 41.108	+74 59 50.17	+ .075	− .05	− .022	+ .04	+ .054	− .13
2316	5 29 59.231	+64 6 29.33	− .014	+ .10	− .099	− .01		
2318	30 19.857	+ 3 43 0.74	− .024	+ .49	− .045	+ .54		
2321	30 42.097	+ 9 26 24.24	.000	+ .93	− .023	+ .33	+ .027	− .29
2329	31 35.370	− 5 26 17.02	− .033	+ .59	− .035	− .05	+ .049	− .46
2330	31 41.862	− 5 27 51.00	+ .018	+ .10	− .043	− .10	+ .054	+ .02
2331	5 31 45.804	− 5 57 28.52	+ .019	+ .29	− .024	+ .57	+ .029	− .23
2334	32 24.412	− 1 14 55.02	− .016	+ .13	− .022	+ .22	+ .033	− .12
2337	32 54.205	+10 59 23.62	+ .020	+ .54				
2338	32 55.807	− 6 6 38.56	+ .027	+ .51	− .029	+ .78		
2340	33 9.637	+21 5 53.55	− .036	+ .79	− .046	+ .47	+ .003	− .08
2351	5 34 58.797	− 2 38 31.67	+ .002	+ .09	− .018	+ .30	+ .043	− .12
2353	35 7.742	−27 15 11.74	+ .008	+ .22				
2354	35 16.134	+24 11 1.35	− .020	+ .22				
2360	35 57.920	−17 53 24.64	− .028	+ .27				
2364	36 39.820	+56 32 39.51	− .025	+ .46	− .072	+ .33		
2367	5 36 55.949	−34 6 47.81			− .039	+ .27	+ .070	− .72
2366	36 58.415	− 1 58 51.94	+ .007	− .15	− .036	+ .33	+ .039	− .53
2363	37 43.306	+85 9 47.03	+ .008	− .06	− .005	+ .05	− .090	− .12
2384	39 20.050	−30 34 13.87			− .017	+ .70		
2387	40 5.311	+49 47 43.17	+ .040	+ .23	− .022	+ .41	+ .077	− .22
2393	5 41 14.582	−20 9 30.83	− .068	− .05				
2394	41 20.122	−22 28 18.72	− .050	− .45	− .084	+ .21	+ .021	− .27
2401	42 26.641	+15 47 39.97	− .011	− .17	− .014	+ .30		
2402	42 37.478	+29 37 58.31	− .011	+ .29				
2403	42 45.027	+ 9 29 45.71	− .014	+ .37				

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei		Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ				Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″		h m s	° ′ ″	s	″	s	″	s	″
2405	5 43 3.732	+17 42 8.45	−0.024	+0.75	−0.049	+0.22	+0.035	−0.01	2659	6 19 22.312	−33 23 51.81			+0.014	−0.54	+0.035	−0.70
2410	43 12.638	−32 20 3.52			+ .008	− .76			2658	19 23.808	−17 55 3.60	+0.030	+0.15	+ .013	+ .06	+ .070	− .13
2412	43 33.384	−14 50 55.84	+ .008	+ .45	− .005	− .15	+ .045	− .08	2656	19 41.649	+70 34 43.15	+ .063	+ .11				
2411	43 38.747	+39 30 32.78	− .039	+ .40	+ .018	+ .15			2661	19 47.614	+ 4 37 55.96	+ .007	+ .20	− .024	+ .68	+ .059	− .23
2417	44 11.921	− 9 41 42.72	− .015	− .03	− .023	+ .08	+ .015	− .23	2662	19 56.172	+ 8 55 30.41	− .007	− .29				
2419	5 44 51.231	− 4 6 50.53	− .026	+ .48					2668	6 20 40.405	−11 29 19.09	+ .018	+ .14	− .016	+ .38		
2431	46 12.003	−14 30 17.12	+ .006	+ .24	+ .027	− .11			2671	21 1.414	+42 0 9.41	+ .005	+ .24				
2430	46 17.410	+39 7 41.19	− .039	+ .15	− .031	+ .13	+ .006	− .11	2681	22 51.709	− 1 27 42.49	+ .028	− .10	− .005	+ .11		
2441	48 5.737	−20 53 3.88	− .008	− .25	− .035	+ .35	+ .051	− .13	2689	24 8.959	+16 17 13.89	− .051	+ .32				
2442	48 18.907	−35 47 44.70			− .029	+ .17	+ .052	− .35	2691	24 15.327	− 4 42 53.05	− .001	− .56	− .028	− .69	+ .048	− .57
2443	5 48 33.549	+55 41 29.52	− .016	+ .78	− .032	+ .87	+ .025	+ .39	2688	6 24 16.501	+58 13 10.86	+ .072	− .30	− .027	− .83	+ .072	+ .02
2445	48 36.699	+27 35 45.78	− .035	+ .37	− .098	+ .50	− .006	+ .19	2695	24 30.589	+20 15 39.67	−. 026	+ .68	− .019	+ .50	+ .037	+ .01
2461	51 6.645	+ 7 23 39.72	− .023	+ .06	− .028	+ .19	+ .028	− .11	2701	25 38.058	+28 15 47.38	− .004	+ .08				
2475	52 37.971	+11 30 45.52	+ .018	+ .33					2704	26 16.343	−22 32 27.12	− .038	− .40				
2479	52 59.309	−14 10 49.00	+ .041	+ .53	− .006	+ .60	+ .054	+ .11	2709	27 12.515	+46 58 39.44	+ .006	− .34				
2480	5 53 21.070	+54 16 50.80	+ .013	+ .20	− .017	− .21	+ .056	− .25	2714	6 27 57.706	+52 31 9.21	+ .004	+ .05				
2482	53 31.569	−31 23 30.67			− .033	+ .78			2716	28 41.786	+82 10 58.45	+ .064	− .08				
2483	54 1.604	+44 56 29.84	+ .012	+ .30	− .045	+ .41	+ .042	+ .22	2721	28 50.872	+ 7 23 21.30	− .020	+ .62	− .052	+ .66	+ .030	+ .18
2485	54 15.540	−18 3 46.08	− .020	+ .12					2733	30 50.457	+61 32 57.08	+ .034	+ .49	− .001	+ .24	+ .112	+ .24
2488	54 36.347	+37 12 32.41	− .020	+ .54	− .070	+ .82	.000	+ .13	2740	31 48.452	−32 39 21.90			.000	− .08		
2486	5 54 48.715	+75 35 9.98	+ .050	+ .27					2741	6 31 54.751	−22 54 15.70	+ .010	+ .05	+ .006	+ .05	+ .070	.00
2491	54 52.688	−35 17 25.14			+ .035	− .09	+ .114	+ .37	2746	32 53.791	− 5 8 52.23	+ .029	− .09	− .030	− .52		
2492	54 58.149	+ 0 32 50.42	− .007	+ .54	− .040	+ .55			2748	33 5.807	−18 35 50.22	+ .024	− .05	+ .055	+ .75		
2494	55 18.462	+33 7 58.79	− .059	+ .54					2752	33 22.765	+16 27 52.85	− .049	+ .08	− .038	+ .39	+ .036	+ .14
2496	55 30.601	− 9 33 44.72	− .040	− .74	− .110	− .37			2753	33 27.771	+39 27 30.54	− .019	− .01	− .020	+ .03	+ .028	− .29
2509	5 57 9.843	+22 24 1.08	− .018	+ .35	− .001	+ .58			2745	6 33 27.883	+79 38 58.86	+ .128	− .05	+ .039	+ .25	− .015	+ .23
2513	57 53.481	+42 54 56.16	− .024	− .36	− .078	− .17			2757	33 45.238	+ 2 46 11.85	− .017	+ .41				
2516	58 10.293	−25 25 5.36	− .036	− .82					2758	34 34.596	+22 5 53.49	− .002	+ .05				
2517	58 15.403	+ 9 38 55.19	+ .015	+ .57	− .015	+ .33	+ .076	+ .04	2782	36 50.850	+ 9 57 58.30	+ .007	− .30	− .031	− .48	+ .039	− .70
2518	58 32.215	+51 34 37.54	− .004	+ .60	− .068	+ .12			2783	37 7.356	+11 4 26.87	− .051	+ .60				
2524	5 59 33.613	+23 16 7.99	− .031	+ .63	− .031	+ .71	+ .028	+ .26	2787	6 37 51.401	+32 37 55.91	− .054	+ .61				
2533	6 1 0.531	+ 4 9 51.05	− .031	+ .81	− .020	+ .56	+ .038	− .18	2795	39 19.098	+25 12 24.46	− .032	− .23	− .050	+ .38	+ .037	.00
2542	2 39.150	+26 41 28.89	+ .021	+ .47					2799	40 26.107	+57 14 56.71	.000	+ .48	− .077	+ .49		
2545	2 45.623	−14 55 38.82	− .003	+ .20	− .043	− .27			2802	40 50.289	−25 27 29.99	+ .025	+ .03				
2548	3 11.626	− 3 19 55.18	+ .033	+ .92					2805	41 4.806	+12 58 40.03	− .018	+ .31	− .031	+ .49	+ .037	− .03
2549	6 3 17.332	+14 46 43.70	− .025	+ .41	− .044	+ .92	+ .028	+ .12	2807	6 41 20.114	+43 39 13.47	+ .022	+ .17	− .051	+ .35	+ .042	+ .07
2554	3 47.121	−21 48 9.29	− .019	− .46					2810	41 50.664	−16 36 44.18	− .015	− .64	− .049	− .58	− .001	− .38
2561	5 18.436	+65 44 8.52	+ .040	+ .16	+ .012	+ .08	+ .039	+ .35	2809	41 56.646	+48 52 13.69	+ .017	+ .30	+ .054	+ .03		
2563	5 51.843	+48 43 40.78	− .053	− .01	− .037	+ .45			2812	42 26.998	+ 8 40 4.18	− .002	+ .37	− .008	− .21		
2577	7 34.764	+19 48 30.87	− .009	− .43	− .032	+ .07			2825	43 48.712	−20 55 59.92	− .029	− .15	− .057	+ .56		
2578	6 7 40.499	+14 13 37.31	− .010	− .33	− .058	+ .73	+ .047	+ .16	2827	6 43 57.018	+ 2 29 43.51	+ .005	+ .41	− .029	+ .52	+ .071	− .31
2593	10 20.980	+22 31 47.74	− .055	+ .02	− .053	+ .13	+ .027	− .17	2835	45 27.879	+41 52 16.10	+ .012	+ .28	− .025	− .07	+ .052	+ .26
2594	10 35.128	+69 20 55.68	+ .080	+ .07	− .016	− .04	+ .095	− .10	2837	45 29.774	− 2 11 9.96	+ .042	+ .28	− .039	− .60		
2595	10 35.755	+36 10 21.16	− .021	+ .56	− .020	+ .54			2836	45 30.829	+16 17 21.81	− .045	+ .51	− .008	+ .22		
2597	10 59.991	+61 32 29.71	+ .027	− .04	− .068	− .38			2838	45 33.690	−15 3 32.51	+ .004	+ .09	− .006	+ .95		
2598	6 11 11.822	− 6 15 2.24	− .008	+ .92	− .032	+ .28	+ .049	− .05	2834	6 45 37.636	+68 58 40.73	+ .066	+ .45	− .021	+ .09	+ .061	+ .21
2602	12 1.419	+ 1 11 37.79	+ .002	+ .23					2849	47 2.379	−32 25 16.27			+ .002	− .60	+ .118	− .89
2603	12 13.914	+12 17 39.64	+ .020	− .15	− .021	− .36	+ .038	+ .10	2851	47 20.647	+25 45 8.99	+ .008	− .10				
2607	12 24.151	+23 46 3.83	− .024	+ .75	− .074	+ .41			2853	47 50.800	+34 3 11.27	− .069	− .11	− .080	+ .13	+ .035	− .34
2610	13 0.413	+59 2 24.11	− .011	− .13	− .032	− .16	+ .053	− .29	2856	49 9.287	+77 4 34.76	+ .128	+ .33	+ .020	+ .43	+ .124	+ .19
2616	6 13 49.434	+14 24 42.42	− .020	+ .44					2863	6 49 49.984	+44 0 17.96	− .050	− .11				
2618	13 52.944	−35 6 52.92			− .049	+ .33	+ .013	− .36	2867	50 24.828	+13 16 27.39	+ .019	+ .09	+ .006	− .12	+ .063	− .25
2620	14 21.480	−16 47 12.72	+ .020	+ .01	+ .017	+ .51			2870	50 42.313	−11 56 37.09	+ .005	+ .17	− .014	− .05	+ .043	− .21
2631	16 6.006	− 7 47 25.45	+ .015	− .24	− .018	− .10	+ .051	− .23	2869	50 47.285	+58 31 22.69	+ .039	− .02	− .022	− .01	+ .090	− .16
2630	17 15.712	+30 0 0.54	− .021	+ .34					2882	52 18.209	+10 3 17.60	+ .010	+ .23	+ .001	− .04		
2642	6 17 26.010	−30 1 45.35	− .049	− .05	− .036	− .26	+ .068	− .70	2885	6 52 47.488	−16 57 21.67	− .024	− .33	− .059	− .24	+ .029	− .20
2649	18 2.511	−29 38 1.26							2890	53 56.340	+38 9 24.20	− .036	− .31	− .062	+ .04		
2650	18 25.379	+22 33 12.76	− .017	+ .23	− .044	+ .28	+ .032	+ .10	2898	55 0.316	+ 3 42 18.72	+ .009	+ .43				
2654	19 7.338	+49 19 41.11	− .058	+ .42	− .102	+ .51	− .041	+ .61	2903	55 40.673	−28 52 9.09	− .021	− .56	− .025	− .26	+ .052	− .48
2638	19 8.724	+86 45 3.79	− .066	+ .08	− .046	− .48	− .027	+ .09	2905	55 51.500	−30 53 41.52						

2810. C. of g.

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
2915	6 56 47.537	− 8 18 4.27	+0.036	+0.53				
2918	57 50.656	+24 19 25.38	.000	+ .21	−0.029	+0.74		
2920	58 0.973	−25 6 30.30	+ .025	− .73	+ .074	+ .24		
2925	58 43.906	−27 49 35.49	+ .010	− .52	+ .039	− .03	+0.105	−0.04
2927	59 24.390	+59 54 52.63	+ .085	.00				
2928	6 59 39.683	+20 40 54.17	− .011	+ .38	− .042	+ .50	+ .032	− .01
2932	6 59 53.546	−23 43 21.95	+ .003	+ .13	− .001	+ .33	+ .045	− .13
2934	7 0 21.911	−15 31 17.42	+ .023	− .42	+ .001	.00	+ .049	− .60
2941	1 35.384	−21 55 2.02	+ .032	+ .58				
2953	3 9.386	−11 10 38.51	+ .011	+ .61	.000	+ .60		
2954	7 3 18.208	+33 57 3.90	− .029	− .28				
2956	3 46.212	+ 7 35 24.36	.000	− .05	− .050	− .49		
2959	4 3.980	+16 3 6.55	− .037	+ .22	− .027	+ .69	+ .019	+ .14
2966	5 14.997	+71 56 27.86	+ .119	+ .46				
2971	5 20.508	−26 16 23.84	− .002	−1.22	− .005	− .24	+ .061	− .61
2957	7 5 57.087	+87 10 10.04	− .266	+ .19	+ .097	.00	+ .027	+ .01
2977	6 29.945	+39 26 40.12	− .014	+ .65	− .034	+ .42	+ .036	− .01
2978	6 30.151	− 4 7 7.88	− .019	+ .14	− .051	+ .10	+ .015	+ .10
2981	6 44.030	+26 58 52.00	− .055	− .25	− .061	+ .28		
2982	7 32.779	+51 33 17.61	+ .012	+ .45	− .104	+ .81		
2984	7 7 33.623	− 0 10 37.79	− .002	− .15	− .076	−1.02		
2983	7 37.547	+47 44 5.07	− .026	− .07				
2987	8 2.081	− 0 22 2.53	+ .031	+ .12	− .030	− .17	+ .057	+ .12
2994	9 3.930	+16 17 15.11	− .005	+ .14	− .006	+ .44	+ .067	− .08
3004	10 21.789	+12 14 45.61	− .002	− .10	− .017	− .40		
3018	7 12 49.485	+41 1 4.96	− .016	+ .11	− .027	+ .52	+ .050	− .37
3025	13 47.014	+16 40 37.04	− .038	+ .71	− .033	+ .49	+ .030	− .18
3027	13 52.231	− 6 32 40.90	− .013	+ .65				
3031	15 23.798	+82 33 38.58	+ .064	− .25	− .106	+ .09	+ .049	− .22
3035	15 27.198	+ 2 52 45.24	− .004	− .07				
3037	7 15 38.702	+22 7 18.33	− .017	+ .53	− .056	+ .24	+ .044	− .15
3040	16 4.508	−16 15 12.24	+ .033	− .23	− .050	− .92		
3042	16 45.234	+55 25 28.55	− .014	+ .57	− .060	+ .58	+ .043	+ .50
3046	17 2.090	+36 54 11.05	− .048	+ .30	− .097	+ .66		
3051	17 31.429	+20 35 11.51	+ .001	+ .78	+ .009	+ .57		
3054	7 17 52.245	−26 49 20.42	− .015	−1.43				
3061	18 57.031	+40 49 5.80	− .016	+ .28	− .055	− .23	+ .012	− .23
3076	21 4.219	+27 56 54.49	− .032	+ .22	− .053	+ .12	+ .030	− .06
3077	21 7.706	−29 9 21.71	− .023	−1.09	+ .001	− .36	+ .081	− .40
3073	21 27.212	+78 50 38.88	+ .124	+ .02				
3082	7 21 41.659	−13 36 12.04	+ .022	− .01	+ .020	− .48		
3085	22 50.214	−31 35 19.68			− .036	− .50		
3086	23 5.051	+ 8 26 30.00	− .006	+ .16	− .031	+ .21	+ .046	− .18
3084	23 5.510	+68 37 16.27	+ .072	+ .32	+ .011	+ .24	+ .073	+ .09
3092	23 48.629	−22 56 2.64	− .055	+ .11	− .061	− .31		
3095	7 24 4.803	+ 9 4 42.61	+ .006	− .14	− .015	+ .02		
3098	24 17.372	+31 56 6.24	− .003	+ .58	− .028	− .20	+ .036	+ .56
3100	25 8.950	+28 4 19.71	− .033	− .48	− .052	+ .77		
3106	25 37.371	+12 9 46.45	.000	+ .35	− .021	+ .06	+ .060	− .02
3120	27 8.960	− 5 4 6.54	− .030	− .36				
3123	7 27 29.012	+17 14 48.56	− .020	+ .50	− .003	+ .09		
3136	29 48.922	+32 3 14.96	− .049	+ .60	− .017	+ .71	+ .009	+ .12
3141	30 50.511	−22 7 59.16	+ .010	− .04	+ .026	+ .26	+ .076	+ .23
3143	31 5.212	+46 20 49.50	− .027	+ .10	− .146	+ .38		
3146	31 18.189	+27 3 50.15	− .021	+ .89	− .040	+1.09	+ .059	+ .30
3151	7 32 39.190	− 8 8 38.82	− .030	.00				
3157	33 16.155	+54 4 20.75	+ .047	+ .22				
3158	33 23.252	−19 32 2.96	+ .017	+ .02	− .004	+ .09		
3159	33 30.053	+33 21 25.21	− .082	+ .27				
3160	33 32.967	3 56 32.87	− .011	+ .81	− .008	− .01	+ .061	− .02
3161	7 33 37.133	+14 12 47.78	−0.058	−0.05				
3169	34 16.363	+34 45 27.93	− .034	+ .25	−0.077	+0.49	+0.032	−0.04
3171	34 35.574	−34 47 56.59			+ .014	− .03	+ .100	− .44
3170	34 37.811	+57 15 20.71	+ .049	+ .38	− .044	+ .54		
3176	35 22.605	+ 5 25 6.28	− .042	+ .20	− .068	− .10	+ .036	+ .28
3181	7 36 29.195	+23 11 35.56	+ .006	+ .56				
3184	36 40.248	+58 53 15.50	+ .016	+ .26	− .040	+ .38	+ .045	− .20
3197	37 39.829	− 9 22 30.56	− .030	+ .42	− .024	+ .18	+ .037	− .13
3202	39 14.459	+ 0 22 4.69	+ .004	− .04				
3203	39 30.775	+65 38 12.76	− .011	− .06	− .126	+ .62		
3204	7 39 40.822	+63 0 47.91	+ .088	− .05	+ .033	+ .24		
3206	39 50.562	+39 45 4.03	− .014	+ .48				
3207	39 55.309	+24 34 44.82	− .017	+ .29	− .057	+ .45	+ .039	− .23
3211	40 30.691	−28 13 54.13	− .009	− .24	− .059	+ .66		
3212	40 43.729	+28 12 31.17	− .064	+ .47	− .053	+ .31	+ .030	+ .03
3220	7 41 46.980	+18 41 39.33	− .029	+ .59	− .075	+ .68		
3223	42 29.647	−14 22 50.02	+ .018	− .13	− .004	− .04	+ .051	− .17
3224	42 40.422	+33 36 3.76	+ .016	− .37	− .073	+ .21	+ .055	− .16
3226	42 47.193	−34 1 26.26			− .108	+ .40		
3236	43 59.124	−22 20 3.33	− .009	−1.02	− .023	− .36		
3237	7 44 4.271	+ 5 35 48.58	+ .017	+ .38				
3245	45 13.080	+26 27 9.40	− .015	− .65				
3254	46 8.425	−24 40 14.41	+ .018	− .08	+ .033	− .26	+ .093	− .30
3257	46 17.926	−17 2 11.55	− .006	− .35	− .010	− .69	+ .025	− .77
3264	47 22.089	−10 56 11.72	− .002	+ .01				
3267	7 47 48.640	+ 1 57 33.83	+ .013	+ .05	+ .016	+ .29	+ .024	+ .04
3270	48 17.919	−13 41 52.74	− .008	+ .41	− .016	+ .31	+ .042	+ .18
3272	48 22.737	− 2 51 39.62	+ .024	+ .02				
3273	48 54.546	+26 57 40.32	− .036	+ .15	− .064	+ .29	+ .010	+ .23
3276	49 15.383	+47 45 38.32	− .006	+ .36	− .050	+ .62	+ .012	+ .42
3288	7 51 15.140	+74 7 14.73	+ .045	− .04	+ .026	− .05	+ .083	+ .02
3290	51 17.351	+20 4 59.66	− .070	+ .32	− .096	+ .34		
3291	51 34.234	+30 3 3.92	+ .011	− .04				
3295	52 44.049	+15 59 30.55	+ .004	+ .29	− .022	+ .39	+ .064	+ .09
3297	53 0.831	+44 10 45.02	+ .006	+ .66				
3303	7 53 38.024	−22 40 43.93	− .040	+1.30	− .001	+ .73	+ .020	+ .38
3309	54 27.346	+ 2 25 32.60	− .023	+ .14	− .034	− .13		
3313	54 40.707	−30 7 54.43			− .009	+ .61		
3317	55 18.791	+60 31 52.29	+ .079	+ .40	− .064	+ .09	+ .097	− .02
3319	55 23.937	+13 26 50.13	+ .024	+ .01				
3323	7 55 59.358	− 3 28 26.96	+ .028	+ .17	− .035	− .22	+ .041	− .27
3326	56 23.719	+25 35 57.66	− .009	+ .38	− .030	+ .20	+ .037	+ .11
3327	56 30.350	−18 11 33.18	+ .011	− .69	− .028	− .03		
3337	57 46.420	+ 9 7 19.22	− .005	+ .07				
3344	58 44.910	− 6 7 37.95	+ .029	+ .51				
3345	7 58 54.845	+28 0 21.25	− .053	+ .61	− .069	+ .56	+ .013	+ .11
3341	7 59 11.676	+84 16 46.00	− .121	− .26	− .074	+ .11	− .028	− .20
3354	8 0 53.910	+13 19 58.89	+ .004	+ .44	− .018	+ .67	+ .039	+ .02
3361	1 23.507	−25 29 9.70	+ .035	− .53				
3365	1 59.863	− 0 21 30.32	− .035	+ .27				
3371	8 2 49.394	+51 43 27.80	− .014	+ .35	− .068	+ .25	+ .016	− .04
3374	3 21.168	+21 48 2.91	− .018	+ .92	− .040	+ .86	+ .047	+ .46
3377	3 59.439	−20 20 13.05	− .040	− .67	− .048	+ .22		
3381	4 21.003	−24 5 13.38	+ .006	+ .80	+ .015	+ .61	+ .068	+ .29
3388	5 18.808	+35 40 51.40	− .039	+ .45				
3387	8 5 22.269	+68 41 48.88	+ .050	+ .22	− .014	+ .24	+ .060	+ .03
3389	5 24.845	+53 28 6.02	− .009	+ .71				
3393	5 56.302	+25 44 10.39	− .018	+ .37	− .025	+ .47		
3395	6 43.633	+49 10 57.95	− .019	+ .39				
3397	6 46.165	+14 51 8.92	+ .006	+ .56				

3136. C. of g.

3176. C. of g.

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
3399	8 7 11.254	−13 34 39.73	−0.019	+0.16	−0.073	+0.61	+0.037	0.00
3404	7 45.180	−12 42 12.97	+ .004	− .01	− .013	− .18		
3403	7 52.170	+56 40 42.70	+ .036	+ .30	− .224	+ .12		
3405	7 54.760	+17 52 30.93	− .035	+ .88	− .001	+ .97	+ .059	+ .67
3422	9 53.136	−15 33 40.93	− .001	− .02	− .005	+ .10	+ .061	− .50
3420	8 10 9.963	+75 59 18.01	+ .066	+ .32	+ .109	+ .11	+ .090	+ .46
3419	10 10.463	+82 40 0.87	− .023	− .03	− .306	+ .18	+ .019	.00
3432	12 26.296	+72 38 31.67	+ .053	+ .31	+ .005	+ .19		
3435	12 26.960	+ 9 25 3.98	− .003	+ .58	− .001	+ .32	+ .049	− .15
3439	13 21.676	+ 4 27 5.23	+ .002	− .06				
3444	8 13 56.780	−16 3 7.39	+ .010	− .15	− .027	+ .30		
3454	15 30.657	+27 27 42.47	− .052	+ .48	− .064	+ .60	+ .019	+ .34
3455	15 39.422	− 9 55 51.22	− .009	− .37				
3458	16 4.723	+24 15 34.94	+ .018	+ .80	− .058	+ .82		
3460	16 26.741	+60 52 12.95	+ .045	+ .62	− .001	+ .31		
3466	8 17 42.381	+43 25 48.08	− .053	+ .57	− .094	+ .36	− .026	− .15
3473	18 25.797	−32 48 54.74			− .025	− .06		
3478	19 4.286	+18 34 26.77	− .031	+ .09	− .012	+ .09	+ .030	− .23
3480	19 9.649	+32 32 7.75	+ .006	− .05				
3483	19 49.198	+10 52 29.62	− .003	+ .56	− .037	+ .15		
3488	8 20 43.816	−28 43 39.53						
3495	21 35.274	+17 17 39.72	− .022	+ .01	− .039	+.16		
3497	21 49.435	−23 48 7.46	− .006	+ .23	+ .070	− .15		
3498	21 53.477	+ 7 48 35.98	+ .018	+ .26	+ .028	− .05		
3499	21 54.803	− 3 39 38.87	+ .018	+ .09	− .026	+ .08	+ 032	+ .02
3501	8 22 26.546	−14 41 4.94	+ .028	− .03				
3506	22 42.354	− 3 44 23.35	− .058	+ .53	− .053	− .69		
3479	23 38.053	+88 51 28.15	+ .051	+ .09	+ .643	− .08	− .028	− .21
3513	24 2.877	+60 58 13.98	+ .023	+ .61	− .061	+ .41	+ .051	+ .23
3515	24 26.337	+14 27 36.70	− .021	− .09	− .014	+ .38	+ .057	− .35
3519	8 25 19.469	+26 26 37.80	− .012	+ .13				
3536	27 19.284	+18 20 56.63	− .041	+ .57	− .052	+1.00	+ .030	+ .01
3541	28 2.723	+38 16 29.43	− .054	+ .11	− .026	+ .35	− .016	− .28
3542	28 22.428	+20 41 49.57	− .016	+ .59	− .056	+ .68	+ .028	+ .17
3544	28 33.314	+36 41 30.87	− .052	− .09	− .061	+ .12		
3563	8 31 24.574	+73 53 37.94	+ .115	− .16	+ .102	− .01	+ .130	+ .08
3568	32 33.320	+65 16 54.08	+ .042	+ .10	− .124	+ .25		
3569	32 58.562	+82 30 27.60	+ .110	+ .01				
3573	33 1.925	+ 9 55 1.76	− .012	+ .50	− .023	+1.03		
3576	33 33.437	−18 25 6.28	− .039	+ .34				
3579	8 33 41.177	+ 5 57 58.80	− .021	+ .71	− .047	+ .45	+ .003	+ .45
3577	33 44.772	+52 58 32.70	+ .024	+ .25	− .037	− .03	+ .073	+ .02
3586	34 50.286	+ 3 36 20.54	+ .004	+ .54	− .048	+ .21	+ .025	+ .02
3588	35 15.161	+51 41 43.21	+ .002	+ .23				
3590	35 24.258	+20 2 37.12	− .025	+ .18	− .051	− .10		
3592	8 35 50.494	+46 5 53.72	− .032	− .04	− .042	+ .43		
3596	36 28.264	−12 12 33.55	− .018	+ .82	+ .005	+ .31	+ .037	+ .19
3604	37 9.978	−35 2 29.20			+ .038	− .15	+ .040	− .45
3605	37 23.330	− 8 47 5.09	− .027	− .15				
3614	38 56.901	+21 44 21.45	− .006	+ .49	− .040	+ .62	+ .030	+ .01
3616	8 39 18.305	+ 3 40 8.30	− .004	+ .88	+ .002	+ .44		
3624	40 25.511	+18 25 51.70	− .030	+ .45	− .028	+ .51	+ .030	− .08
3629	40 34.641	−32 54 55.38			− .075	− .12	+ .023	− .83
3630	40 45.553	+30 58 14.01	− .058	+ .33	− .060	+1.19		
3633	41 3.021	+ 5 57 11.98	− .011	+ .32	− .054	+ .07		
3634	8 41 33.923	−20 53 41.90	+ .011	− .61				
3636	42 9.719	+29 2 7.38	− .062	+ .37	− .062	+ .46	+ .011	+ .28
3641	42 31.019	−10 43 57.87	+ .007	+ .09				
3644	42 48.438	+ 6 41 41.83	− .006	+ .55	− .032	+ .21	+ .028	+ .06
3646	42 57.192	−26 20 17.10	+ .027	− .04				
3650	8 43 26.938	− 1 37 16.90	−0.021	+0.76	+0.010	+0.40		
3656	45 35.598	− 3 9 49.55	− .017	+ .53	− .064	+ .35	+0.025	+0.05
3666	46 50.955	+15 37 47.16	+ .022	+ .24	− .013	+ .44		
3668	46 53.544	−29 10 58.87			+ .023	+ .23		
3667	46 55.263	+44 0 25.44	+ .024	+ .66	− .066	+ .91		
3670	8 47 11.407	+59 20 18.41	− .021	+ .31				
3671	47 12.731	+62 14 39.42	− .018	+ .06	+ .006	+ .12	+ .042	− .01
3675	47 20.964	−27 25 51.80	+ .050	− .53	+ .071	− .05	+ .109	− .36
3679	48 8.021	+28 37 5.80	− .014	+ .18	− .033	+ .30	+ .043	− .06
3681	48 41.500	+78 25 57.24	+ .230	− .41				
3690	8 49 40.352	+30 51 52.20	− .026	+ .11	− .039	+ .63	+ .023	+ .09
3699	50 35.448	− 8 28 32.01	+ .034	+ .75				
3701	51 25.828	+ 6 13 54.96	− .007	+ .57	− .016	+ .32	+ .035	.00
3704	51 45.603	−17 57 16.47	− .021	+ .29				
3705	51 49.959	+11 54 48.70	+ .019	+ .27	− .051	+ .44	+ .043	− .14
3711	8 52 45.370	+22 8 57.11	+ .004	+ .44				
3721	54 4.865	+48 20 13.73	− .013	− .44	− .042	− .08	+ .033	− .62
3724	54 23.222	+12 8 56.55	− .020	+ .30	− .042	+ .42	+ .034	− .04
3729	55 44.990	+37 53 49.74	− .059	+ .17				
3730	55 46.712	+42 4 51.16	+ .059	+ .32	− .010	+ .50	+ .106	+ .17
3728	8 55 48.464	+67 55 24.65	+ .090	+ .73	− .017	+ .45	+ .097	+ .32
3747	58 8.101	− 0 11 19.22	− .020	+ .47	− .050	+ .09		
3750	58 21.372	+24 44 56.74	− .018	+ .47	− .034	+ .10	+ .032	+ .19
3752	58 30.787	+47 27 15.72	− .018	− .09	− .040	+ .59	+ .032	+ .08
3751	58 31.363	+54 34 50.50	+ .015	+ .46	− .040	+ .20	+ .022	+ .11
3761	8 59 59.186	− 4 52 25.80	− .005	+ .28				
3757	8 59 59.251	+84 29 8.66	− .161	+ .04	+ .031	− .33	− .066	− .02
3774	9 1 45.833	+38 45 11.14	− .029	+ .50	− .025	+ .63	+ .003	+ .38
3777	2 1.524	+ 5 23 34.39	− .028	+ .24	− .027	− .26	+ .019	− .16
3785	3 30.129	+29 57 24.36	− .034	+ .13	− .057	+ .47		
3788	9 3 41.188	+10 58 15.50	− .010	+ .23	− .041	+ .24	+ .028	− .03
3787	3 48.976	+67 26 25.46	+ .043	+ .56	− .100	− .34	+ .075	+ .09
3791	4 22.860	+26 56 25.45	+ .010	+ .28	− .025	+ .74		
3793	4 45.275	+63 49 11.96	+ .081	+ .32	+ .009	+ .27		
3796	4 45.282	−25 33 18.23	− .033	+ .42	− .030	+ .75	+ .003	− .20
3797	9 5 3.005	+22 20 59.03	+ .006	+ .25	− .027	+ .58	+ .050	+ .03
3801	5 27.669	−26 27 48.55	+ .031	− .77				
3804	5 35.706	−12 3 11.39	− .025	+ .20	+ .011	+ .56		
3806	5 45.234	−20 37 21.06	− .020	− .21				
3814	6 45.676	−30 3 30.49	+ .008	− .94	+ .035	− .41	+ .043	− .03
3820	9 7 44.305	+18 21 8.08	− .029	+ .13	− .027	+ .48		
3827	8 54.321	+43 31 40.69	− .029	− .01	− .035	+ .49	+ .030	+ .15
3834	10 27.806	+ 2 37 53.68	− .018	+ .31	− .021	+ .29	+ .034	− .07
3836	10 48.192	+54 19 58.11	+ .013	+ .51	− .057	+ .16		
3842	12 14.116	+74 19 59.45	− .003	+ .22				
3848	9 12 27.526	−33 0 38.93			− .093	− .20		
3847	12 29.733	+47 7 51.19	− .011	+ .29	− .002	+ .05		
3852	12 48.880	+ 1 2 34.91	− .003	+ .33				
3853	12 58.271	− 6 2 22.08	− .008	+ .45	+ .052	+ .15		
3857	13 26.994	+23 23 37.17	− .040	+ .57				
3861	9 14 10.924	+37 7 15.68	− .066	+ .04	− .085	+ .75	− .022	+ .28
3865	14 47.873	+18 1 27.53	+ .004	+ .63	− .023	+ .82	+ .044	+ .55
3871	15 27.012	−16 29 2.21	− .012	− .15				
3875	16 13.685	+57 1 5.43	+ .026	+ .76				
3878	16 29.452	+34 42 38.26	− .044	+ .27	− .055	+ .27	+ .009	− .09
3881	9 17 12.920	+13 25 55.50	− .028	− .17				
3891	18 10.294	−25 38 43.84	− .041	− .39	− .012	+ .12	+ .032	+ .01
3900	19 44.766	+36 54 35.49	− .037	+ .21				
3903	19 57.348	−28 30 45.58	− .054	− .50	+ .016	− .73		
3905	20 17.406	+26 30 21.75	− .038	+ .20	− .031	+ .26	+ .025	− .13

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
3911	9 21 23.348	+16 54 35.71	−0.037	+0.25	−0.087	−0.27		
3914	21 39.071	− 4 47 35.90	− .016	+ .48	+ .035	− .24	+0.053	−0.18
3918	22 16.307	−25 0 45.79	− .019	− .77				
3929	23 54.130	− 8 19 57.94	− .001	+ .16	− .012	+ .14	+ .036	− .01
3935	25 20.543	− 2 26 25.54	+ .027	− .08	− .003	+ .08		
3938	9 25 38.159	+63 23 27.37	+ .061	+ .12	− .010	+ .03	+ .136	+ .07
3945	26 8.938	−35 37 21.58			+ .011	+ .88	+ .098	+ .09
3944	26 11.574	+33 59 10.62	− .020	+ .28	− .050	+ .97		
3943	26 31.677	+81 39 36.00	+ .015	+ .24	− .139	+ .13	+ .001	+ .03
3950	26 55.032	−27 43 4.87	− .002	+ .13				
3955	9 27 51.120	−52 1 12.68	+ .032	+ .46	− .011	+ .50	+ .069	+ .27
[illegible]	27 52.917	+70 9 40.68	+ .111	+ .33	− .007	+ .23	+ .105	.00
3956	27 54.297	+11 37 57.90	.000	+ .36	− .030	+ .31	+ .022	− .14
3957	27 56.468	+10 2 49.68	+ .016	− .17	− .003	+ .12		
3962	28 48.846	+ 2 11 49.71	+ .006	+ .33				
3964	9 29 19.692	−13 11 3.74	+ .008	+ .05				
3968	29 38.043	+36 43 53.18	− .031	+ .32	− .060	+ .13	+ .016	+ .26
3969	29 41.766	+52 23 9.33	− .017	+ .09	− .065	+ .03		
3976	30 48.090	− 5 34 46.24	− .023	+ .20	− .015	− .25	+ .012	− .06
3984	32 4.462	−19 14 49.83	+ .040	− .27				
3986	9 32 4.626	−35 29 17.83						
3993	33 15.168	+ 7 10 21.87	.000	+ .28	.000	+ .34	+ .022	− .08
3992	33 16.225	+67 36 40.81	+ .006	+ .74				
3996	33 56.150	−31 50 27.58			− .049	− .38		
4001	34 25.250	+43 29 2.99	+ .046	+ .43				
4003	9 34 32.619	+ 4 59 19.61	− .016	+ .66	− .036	+ .85	+ .029	+ .03
4004	34 42.355	+20 38 11.75	+ .026	+ .16				
4006	35 51.377	+69 34 48.27	+ .033	+ .41	− .047	− .06	+ .079	+ .31
4012	36 1.569	− 0 48 5.94	− .024	− .29	− .034	+ .28	+ .032	− .18
4013	36 7.650	−10 13 49.73	+ .034	− .30	+ .015	+ .02		
4021	9 36 42.642	−13 59 29.43	+ .030	− .40	+ .004	− .68	+ .063	− .52
4023	37 8.970	+10 14 3.35	− .022	+ .19	− .017	+ .10	+ .034	− .14
4025	37 21.901	+40 6 2.32	− .029	+ .35	− .003	+ .38		
4030	37 47.702	+48 46 25.50	− .022	+ .29				
4036	38 11.766	+35 26 13.18	− .046	+ .40				
4040	9 39 38.967	+14 21 55.95	− .014	− .05	+ .002	+ .62	+ .041	− .31
4049	40 51.482	−27 25 32.25	+ .067	− .49	+ .066	+ .11	+ .098	− .57
4051	41 9.681	−22 24 25.83	+ .055	− .62				
4053	41 35.846	+24 7 13.37	− .034	+ .01	− .046	+ .66	+ .025	+ .06
4054	41 42.126	+19 1 47.40	− .020	+ .07				
4058	9 42 12.743	+ 7 3 19.58	+ .021	+ .34	− .032	+ .64		
4069	43 45.615	+46 22 16.80	− .028	+ .14	.000	+ .38	+ .021	+ .10
4080	45 40.281	+59 23 32.86	+ .006	+ .08	− .052	+ .21	+ .023	+ .04
4092	47 27.293	− 3 53 28.21	+ .007	+ .34	− .003	+ .29	+ .026	+ .19
4095	47 37.771	+24 45 3.51	− .027	+ .32	− .071	+ .88		
4098	9 47 52.188	−14 29 39.21	− .028	− .26	− .012	− .19		
4101	48 30.110	+26 21 39.13	− .033	+ .22	− .019	+ .20	+ .017	− .22
4103	49 [illegible]	+61 28 14.27	− .014	+ .12				
4115	51 19.937	−18 39 12.24	+ .019	+ .05	− .044	+ .36	+ .068	− .10
4118	51 42.987	+73 14 14.14	− .034	+ .05	− .123	+ .31	+ .053	+ .13
4121	9 52 7.724	+32 44 25.84	− .002	− .20	− .029	+ .92		
4122	52 24.400	− 7 17 20.40	− .011	+1.03				
4123	52 27.527	+ 9 17 21.10	+ .011	+ .48	+ .017	+ .50	+ .050	− .18
4126	53 5.852	+41 24 48.56	− .045	− .24	− .035	+ .39	+ .028	+ .04
4135	54 11.436	+12 48 11.37	− .004	− .33	+ .012	+ .51	+ .045	− .37
4137	9 54 42.793	+57 10 17.44	+ .070	+ .52	+ .049	+ .77		
4141	55 17.727	+21 40 48.69	− .014	+ .47				
4142	55 39.043	−35 31 54.27			− .056	− .80	+ .018	−1.06
4144	55 49.720	+ 3 44 37.85	+ .030	− .28	+ .016	+ .35	+ .045	− .32
4147	56 15.100	+ 8 24 17.00	.000	+ .46	− .003	+ .28	+ .043	− .07
4150	9 56 41.513	+32 17 36.22	−0.026	+0.70	−0.049	+1.15	+0.011	+0.70
4148	56 48.919	+84 16 56.35	− .141	+ .06				
4164	9 58 59.417	− 0 42 13.26	− .019	− .23				
4177	10 0 53.030	−23 55 18.97	− .022	− .23	+ .045	+ .42		
4184	1 24.634	−27 49 28.14						
4185	10 1 28.330	−12 42 1.16	+ .003	+ .84	+ .005	+ .48	+ .059	+ .21
4191	2 28.814	+45 25 33.39	+ .032	+ .26				
4195	2 52.170	+ 5 58 39.60	+ .005	− .46	− .019	− .56		
4199	3 14.809	+17 7 44.45	+ .017	+ .75	+ .013	+ .53	+ .091	− .08
4210	4 22.787	+12 20 3.83	− .019	+ .28	− .027	+ .45	+ .033	− .09
4214	10 5 1.545	+18 53 59.62	− .034	+ .49				
4222	6 26.498	−12 26 40.72	+ .014	− .16	.000	+ .74		
4221	6 28.065	+41 1 50.95	− .013	− .36	− .013	+ .09		
4224	6 46.390	+37 46 19.15	− .078	+ .13				
4225	6 55.873	−11 58 58.24	− .013	− .22	− .022	+ .10	+ .033	− .20
4235	10 8 27.259	+28 36 46.96	+ .006	− .36				
4234	8 30.124	+79 19 8.91	+ .081	+ .28				
4248	10 5.873	−32 39 39.97			− .046	+1.03		
4253	11 49.919	+71 26 9.59	+ .059	− .03				
4258	12 23.314	+23 52 35.21	+ .003	+ .11	+ .003	+ .69		
4259	10 12 31.333	+23 47 30.09	− .009	+ .51	− .042	+ .44	+ .032	+ .22
4261	12 34.881	+43 17 22.60	+ .005	− .12	+ .005	+ .39	+ .071	+ .18
4260	12 36.566	+65 28 59.79	+ .069	+ .19	+ .062	+ .15	+ .146	+ .01
4262	12 39.301	+14 6 10.24	− .025	− .07	− .020	+ .43		
4264	12 57.893	−18 56 2.25	+ .010	− .18				
4271	10 13 54.160	− 7 41 37.94	− .015	+ .40	− .022	+ .09	+ .018	− .46
4280	14 41.212	−28 36 59.69	− .052	− .44	+ .024	+ .37	+ .031	− .12
4286	15 40.675	+54 35 38.09	− .030	+ .33	− .161	+ .64		
4290	15 50.435	+20 13 17.84	− .041	+1.10	− .008	+ .63	+ .040	+ .64
4298	17 9.662	+ 2 40 3.23	− .037	+ .36	− .010	− .14		
4301	10 17 52.074	+41 52 38.36	− .020	+ .08	− .016	+ .59	+ .031	+ .14
4303	17 56.903	−23 19 58.41	− .003	− .66	+ .014	+ .23		
4310	18 44.697	+65 56 46.95	+ .075	+ .18	+ .037	+ .09	+ .072	+ .24
4311	18 47.414	+34 17 14.64	− .119	+ .22	− .052	+ .64		
4308	19 0.083	+84 38 4.85	+ .182	+ .38	− .057	+ .13	+ .239	+ .10
4316	10 19 39.079	− 3 41 39.86	+ .038	+ .69	+ .022	+ .93	+ .087	+ .21
4327	21 18.132	+ 9 9 59.54	+ .008	− .25	− .018	− .07		
4332	21 56.190	−28 48 45.56	− .012	− .37				
4330	22 5.106	+82 56 28.83	− .111	− .32	− .004	− .10	− .030	+ .03
4335	22 27.727	−16 27 10.71	− .003	+ .36	− .010	+ .11	+ .037	− .25
4337	10 22 46.652	+59 58 48.14	− .001	− .20				
4344	23 33.110	+37 5 31.61	− .070	+ .45	− .043	+ .40	+ .029	− .06
4346	23 43.050	−30 41 7.83			− .079	+ .27	+ .026	− .78
4348	24 25.131	+16 8 20.41	− .018	+ .74				
4357	25 40.172	− 2 21 17.05	+ .004	− .05	+ .003	+ .19	+ .031	− .13
4356	10 25 41.555	+28 57 55.61	− .057	+ .01				
4358	25 50.339	+56 21 56.66	− .005	+ .30	− .030	+ .28	+ .012	+ .01
4376	28 46.049	+76 6 0.39	+ .056	+ .38	− .046	+ .22	+ .118	+ .26
4379	28 51.750	+40 48 42.85	− .017	− .23	+ .032	− .06		
4380	28 51.811	+ 9 41 34.88	− .013	+ .31	− .024	+ .18	+ .033	− .07
4383	10 29 13.879	+35 22 31.84	− .066	+ .11	− .025	+ .89		
4391	30 18.559	+21 58 52.84	− .014	+ .39				
4390	30 20.649	+57 28 10.43	+ .035	+ .34	+ .010	+ .52	+ .094	+ .31
4392	30 26.736	−23 21 29.45	+ .020	+ .71	− .034	+ .93	+ .040	+ .06
4395	30 53.328	+ 7 20 25.23	− .017	+ .46	− .013	+ .55	+ .038	− .09
4398	10 31 14.108	+ 2 35 32.65	+ .006	+ .20				
4406	32 48.250	−11 49 37.85	+ .009	− .03	− .018	+ .26		
4411	33 15.465	− 8 26 58.79	− .002	− .79				
4418	34 30.220	+32 21 58.84	− .079	+ .47	− .071	+ .52	+ .011	+ .39
4421	34 55.648	−16 29 12.56	+ .050	− .32	+ .060	+ .09		

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
4424	10 35 39.622	+47 13 56.61	−0.051	+0.91				
4428	36 10.648	+80 49 9.06	+ .064	− .34	+0.048	−0.57	+0.057	−0.21
4438	37 35.270	− 1 20 49.10	+ .040	− .48	− .004	+ .18	+ .022	− .34
4439	37 43.362	+69 28 8.61	+ .035	+ .29	+ .046	+ .39	+ .055	+ .10
4445	38 19.972	+10 44 54.54	+ .014	− .11				
4447	10 38 45.162	+ 3 58 31.68	.000	+ .77	+ .028	+ .38	+ .045	+ .29
4451	39 14.448	−32 19 22.46						
4452	39 20.463	+23 34 53.38	− .038	+ .40	− .039	+ .27	+ .028	+ .17
4454	39 27.377	+ 5 8 30.01	+ .003	+ .20	− .050	+ .20		
4458	40 52.357	−23 35 30.03	− .013	− .60				
4464	10 41 41.919	+31 4 40.39	− .032	+ .99	− .028	+ .68	+ .047	+ .47
4467	42 11.408	+ 6 46 7.85	− .021	+ .35	− .052	+ .04	+ .002	− .30
4468	42 22.228	+19 17 14.76	− .033	+ .27	− .015	+ .64		
4476	43 8.804	−25 39 13.88	+ .038	− .65	+ .013	+ .77		
4486	44 51.114	− 1 33 45.37	+ .017	+ .33				
4490	10 45 18.973	+10 56 32.82	− .015	+ .23	− .038	+ .41	+ .031	− .18
4491	45 46.610	+28 22 13.43	− .046	+ .42	− .062	+ .70		
4492	45 55.383	−15 48 2.91	+ .004	− .36	− .002	+ .31	+ .037	− .18
4508	48 2.595	+52 54 10.98	− .003	+ .34	− .059	+ .42		
4514	49 7.310	+34 37 10.80	− .033	+ .57	− .064	+ .72	+ .024	+ .32
4518	10 49 40.141	+43 35 22.59	− .040	− .06	+ .004	+ .30	+ .036	− .23
4521	50 34.287	−13 21 31.22	− .009	− .48	− .033	− .61		
4531	51 33.344	+25 9 0.63	− .022	+ .49	− .011	+ .23	+ .043	+ .20
4532	51 50.911	+ 1 8 14.20	− .017	+ .65	− .001	+1.02		
4545	54 0.300	+78 10 21.08	+ .080	+ .25	+ .046	+ .22	+ .119	+ .58
4549	10 54 37.052	+20 1 26.73	− .013	+ .50				
4553	55 15.520	−19 12 4.82	+ .006	+ .26				
4552	55 16.318	+40 49 52.35	+ .006	+ .17	− .024	+ .48	+ .059	+ .05
4554	55 21.969	+36 29 46.40	− .048	− .52	− .065	− .06		
4555	55 32.262	− 9 55 24.16	− .012	− .30				
4557	10 55 46.015	+12 6 25.71	− .052	+ .16				
4559	56 7.125	−17 53 56.37	+ .008	+ .12	+ .014	+ .58	+ .023	+ .23
4564	56 41.270	+ 4 1 13.82	+ .006	+ .20	+ .002	+ .29	+ .038	− .18
4571	57 19.659	+56 47 5.47	− .004	+ .28	− .009	+ .37	+ .053	− .04
4578	58 44.943	+62 3 33.94	+ .055	+ .23				
4579	10 58 47.817	− 3 6 30.91	− .023	+ .30				
4582	10 59 6.835	+62 9 22.74	− .015	+ .57	− .062	+ .51	+ .027	+ .18
4590	11 0 33.326	+31 50 27.39	+ .001	+ .28				
4592	1 8.964	+ 7 44 30.50	+ .010	+ .25	+ .007	+ .11	+ .048	+ .09
4597	1 42.941	−26 53 17.99	+ .008	+ .59	+ .034	+ .96	+ .042	+ .25
4598	11 1 48.068	−10 40 55.94	+ .004	+ .60				
4602	2 45.596	+18 8 36.27	− .020	+ .12				
4605	2 51.747	−20 45 41.21	+ .034	− .67				
4606	3 4.686	+ 2 21 46.80	− .058	+ .34	− .046	+ .30	+ .012	+ .10
4608	3 18.819	+72 21 54.89	+ .082	− .12				
4616	11 4 27.845	+82 8 31.49	− .050	+ .12				
4621	4 47.847	+25 3 53.34	− .015	+ .78	+ .015	+ .47		
4624	5 6.102	−27 40 25.21	+ .056	+ .22	+ .041	+ .75		
4626	5 27.218	+44 54 20.72	− .033	− .16	− .054	+ .44	+ .031	+ .01
4625	5 44.725	+86 2 51.40	− .064	− .44	− .075	− .20	+ .074	+ .19
4629	11 6 12.272	+48 12 14.07	− .047	+ .33				
4637	7 24.804	+68 40 45.20	− .037	+ .18				
4643	7 58.006	−22 24 58.24	− .004	− .52	− .027	− 24	+ .028	− .42
4645	8 23.169	+55 18 7.91	− .035	+ .30				
4647	8 37.732	−32 1 33.85						
4653	11 10 7.323	+20 56 5.68	− .028	+ .43	− .041	+ .73	+ .028	+ .14
4655	10 18.366	+15 50 23.24	− .030	+ .31	− .027	+ .44	+ .030	+ .08
4661	11 13.081	+23 30 16.47	− .018	+ .61	− .043	+ .18		
4664	11 34.511	−19 13 43.43	+ .065	+ .03				
4668	11 58.563	+13 43 0.75	− .011	+ .40	− .021	+ .79	+ .027	− .32

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
4671	11 12 28.738	+49 53 9.29	+0.026	+0.26	+0.016	+0.67	+0.085	+0.36
4673	12 50.907	− 3 14 28.72	+ .013	+ .92	+ .010	+ .56	+ .036	+ .10
4674	13 10.032	− 6 43 31.16	− .026	+ .12				
4681	13 25.827	+ 2 25 23.32	− .013	− .11	+ .011	+ .42		
4683	14 11.133	+31 57 5.20	− .045	+ .19	− .074	+ .68	− .012	+ .43
4686	11 14 25.902	+33 30 13.39	− .044	+ .17	− .054	+ .46	+ .028	− .14
4690	15 2.918	+38 35 50.04	− .035	+ .14	− .044	+ .92		
4695	15 33.720	− 1 14 28.33	+ .018	+ .27				
4696	15 35.363	−14 22 20.83	+ .010	+ .05	− .012	+ .37	+ .034	− .08
4707	17 16.184	+ 6 26 26.10	+ .002	+ .15	− .021	+ .20	+ .036	− .09
4715	11 18 24.856	+64 44 28.05	+ .060	+ .07	+ .023	− .29	+ .100	+ .04
4724	20 0.976	+10 56 33.33	− .015	+ .26	+ .047	+ .58	+ .038	− .05
4730	21 8.015	−17 16 19.04	+ .050	+ .16	+ .047	+ .01	+ .091	− .29
4735	21 41.837	+16 52 8.09	− .005	+ .15	− .035	+ .65		
4736	21 44.516	+52 32 41.01	+ .008	+ .24				
4737	11 21 47.380	+27 9 34.59	− 038	+ .16				
4740	21 51.009	−35 39 3.79			+ .004	+ .49		
4741	22 25.104	+ 9 4 21.15	+ .016	+ .94				
4743	22 49.648	−20 56 37.58	+ .009	− .11				
4744	22 57.581	+ 3 25 19.40	− .003	+ .27	+ .013	+ .52	+ .044	− .19
4748	11 23 22.742	−11 56 40.28	+ .005	− .47	− .004	− .02		
4752	24 4.828	+ 3 16 10.12	− .022	+ .39	− .022	+ .36	+ .035	.00
4766	25 54.507	−27 37 1.56	+ .047	− .19				
4767	26 6.149	+30 22 56.47	− .027	.00				
4770	26 27.943	+43 35 6.62	− .030	+ .49	− .024	+ .70	+ .024	+ .25
4771	11 26 28.925	− 2 35 21.59	− .014	+1.06	− .017	+ .81	+ .029	+ .63
4774	26 36.926	+81 32 24.96	− .110	− .10	+ .028	− .55	+ .079	+ .27
4778	26 58.331	+69 44 42.90	+ .017	+ .33	+ .015	+ .42	+ .061	+ .08
4788	29 18.571	−31 26 33.26			− .024	+ .02	+ .054	− .55
4797	30 31.663	+ 3 28 36.97	+ .027	+ .32	+ .014	+ .71		
4802	11 31 9.126	+20 51 22.53	− .002	+ .64				
4803	31 9.441	− 3 56 44.82	+ .004	− .06				
4808	31 38.739	+11 36 14.55	− .017	+ .33				
4814	32 52.528	− 9 23 14.98	− .014	− .71	− .051	− .29	+ .016	− .67
4816	33 2.024	+78 0 38.94	+ .021	+ .17				
4817	11 33 6.501	− 0 24 34.36	− .001	+ .10	− .007	+ .42	+ .036	− .08
4825	34 32.256	+47 15 1.36	+ .009	+ .27				
4836	36 2.731	−16 12 15.65	+ .001	+ .43				
4840	36 29.044	−34 19 44.19			− .031	− .40	+ .026	− .54
4846	36 47.494	− 7 59 22.99	+ .002	− .51				
4848	11 37 6.266	+34 37 31.17	− .074	− .25	− .056	+ .04	+ .008	− .22
4856	38 18.285	+67 9 36.18	+ .013	− .06	+ .002	− .14	+ .081	− .14
4869	40 57.536	−17 56 1.20	− .035	− .29	− .025	+ .29	+ .033	− .06
4872	41 39.487	+36 18 36.87	− .051	− .02				
4873	42 0.271	+ 6 56 58.86	− .025	− .06	− .030	− .02	+ .030	− .16
4874	11 42 5.826	+48 11 43.00	+ .009	− .22	+ .009	+ .28	+ .085	+ .08
4879	42 55.279	+56 2 43.72	− .027	+ .40	− .020	+ .30		
4880	43 5.605	+61 49 9.50	− .005	− .07				
4885	44 3.765	+ 8 39 44.71	+ .035	+ .06	− .009	+ .25		
4888	44 7.103	+20 38 9.19	− .035	+ .63	− .006	+1.10	+ .023	+ .41
4890	11 44 32.004	+28 50 2.78	− .017	+ .46				
4892	45 14.119	+14 59 29.05	− .035	+ .38	− .026	+ .53	+ .030	+ .22
4899	46 47.295	+ 2 11 14.84	− .006	+ .43	− .018	+ .55	+ .030	− .08
4900	46 49.632	−26 51 39.81	− .031	− .53	− .035	− .74		
4903	47 12.139	− 4 54 58,37	+ .006	+ .39	+ .002	+ .59		
4907	11 47 33.556	−11 46 18.16	− .032	− .17				
4909	47 44.247	−21 13 7.19	+ .021	− .41				
4911	47 53.785	−30 24 41.59			+ .041	+ .73		
4913	48 19.041	+50 20 53.61	− .019	− .13				
4918	48 39.685	+38 15 24.86	− .044	+ .14	− .010	+ .51	+ .033	+ .21

4683. C. of g.

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
4921	11 48 54.376	+15 51 17.57	−0.026	+0.28	−0.056	0.00		
4924	49 6.937	−33 29 26.85			− .026	+ .13	+0.035	−0.70
4927	49 53.610	+54 6 42.67	− .026	+ .41	− .026	+ .47	+ .025	− .08
4939	51 49.142	+16 3 51.15	− .049	+ .32	− .125	+ .61	+ .003	+ .23
4943	52 11.449	−16 43 59.61	− .002	+ .02	− .043	+ .55		
4950	11 53 23.354	+40 45 44.80	+ .030	+ .22				
4960	54 16.230	+32 41 33.60	− .009	− .05				
4969	56 6.394	+ 4 4 22.09	− .027	− .01	− .045	+ .22	+ .023	− .28
4970	56 14.357	+19 50 15.43	− .034	+ .55				
4977	56 53.410	−10 1 7.32	− .025	− .26	+ .013	− .12		
4978	11 57 1.785	+ 7 1 57.00	− .007	+ .31	− .012	+ .10	+ .030	− .27
4982	57 23.335	+12 47 42.97	− .014	− .09				
4984	11 57 47.002	+65 21 26.60	− .011	+ .35				
4999	12 0 57.665	+86 0 9.88	− .027	+ .11	+ .235	+ .12	+ .246	+ .35
5001	1 23.328	+ 9 8 58.37	− .006	+ .41	− .033	+ .56	+ .022	− .16
5002	12 1 27.661	+77 19 30.38	− .094	+ .31	− .048	− .27	+ .063	+ .26
5006	2 5.032	−35 16 34.69						
5008	2 18.491	+49 34 32.98	− .009	+ .52				
5014	2 56.913	−11 49 24.22	+ .066	− .95				
5018	3 10.419	−23 20 58.53	− .021	− .75				
5032	12 5 40.083	+39 3 1.40	− .058	+ .01				
5033	5 50.636	+ 2 19 7.67	− .079	− .14	− .076	− .41	− .019	− .70
5035	6 14.061	+ 6 13 26.25	+ .007	+ .54	+ .034	+ .18		
5036	6 15.838	−22 12 9.53	− .028	+ .04	− .041	+ .26	+ .011	− .16
5039	6 42.326	+17 13 35.40	− .006	+ .44	− .053	+ .21		
5042	12 7 31.211	− 2 16 49.35	− .039	+ .22				
5047	8 2.971	+26 17 17.39	− .020	+ .44	+ .004	+ .75		
5048	8 6.354	−25 31 27.01	− .027	− .17				
5051	8 42.311	+78 1 58.27	+ .052	− .12	− .067	− .17	+ .013	+ .02
5057	9 36.810	+10 40 46.31	+ .006	+ .18	− .025	+1.23		
5068	12 11 0.729	+53 51 7.00	+ .043	+ .52	− .040	+ .46	+ .065	+ .19
5069	11 43.307	+57 26 57.30	− .009	+ .11	− .053	+ .17	+ .075	+ .16
5071	11 56.771	−17 7 31.80	+ .035	− .48	− .018	+ .75	+ .028	+ .19
5073	12 10.751	+72 58 5.98	+ .013	− .43				
5075	12 22.277	+41 4 39.13	− .067	− .05	− .054	+ .37	+ .033	− .20
5077	12 12 32.961	+24 21 43.88	− .039	− .12	− .035	+ .34		
5079	13 11.116	−16 16 37.29	+ .031	− .12				
5089	14 32.319	+88 6 56.20	− .028	− .02	+ .589	− .30	+ .207	− .10
5091	14 44.917	+30 40 4.49	− .042	− .40				
5093	14 49.522	− 0 22 13.55	+ .010	− .69	− .004	− .22		
5097	12 15 28.458	− 8 29 51.80	− .023	+ .09	− .069	+ .66		
5101	16 4.071	− 0 15 0.36	− .003	+ .21	− .021	+ .28	+ .033	− .06
5104	16 32.409	+ 3 43 48.61	− .003	+ .72	+ .008	+ .89	+ .035	+ .05
5109	17 13.256	+58 16 53.95	+ .009	+ .11	− .014	− .24		
5119	18 44.220	+26 15 44.21	− .044	+ .75	− .048	+ .41	+ .034	+ .27
5129	12 20 23.168	+51 58 39.47	+ .014	− .46	+ .020	− .63		
5136	21 22.521	−27 20 0.33	− .028	+ .74				
5138	21 24.254	−34 46 15.19			− .062	− .18		
5139	21 36.914	+64 13 5.18	− .044	+ .40				
5144	22 9.436	+39 26 4.42	− .060	+ .43	− .036	+ .18	+ .002	− .11
5149	12 22 39.170	+27 41 0.95	− .035	+ .11	+ .029	+ .56	+ .057	+ .11
5150	22 54.258	−32 24 51.11			+ .012	+ .69	+ .057	+ .58
5154	23 12.095	+28 41 6.90	− .073	+ .21	− .046	+ .51	.000	+ .55
5157	23 46.384	+18 14 59.40	− .052	+ .73				
5159	23 52.595	+41 46 12.86	− .053	+ .49				
5167	12 25 10.055	+26 19 40.01	− .019	+ .11	− .074	− .13		
5171	25 57.224	+21 18 40.58	− .041	+ .06	− .068	+ .73	+ .017	+ .02
5172	25 58.844	−16 5 52.86	− .004	− .13	− .019	+ .28	+ .040	− .07
5176	26 21.738	−23 16 55.44	+ .061	− .57	+ .062	+ .04		
5178	26 27.597	+58 49 5.45	− .008	+ .04	+ .034	+ .16	+ .102	− .13
5180	12 26 59.209	− 3 38 47.86	−0.026	+0.27	+0.005	+0.24		
5187	27 32.726	+ 8 1 5.72	+ .015	− .12				
5197	29 15.115	+10 42 33.49	+ .005	+ .06	+ .009	+ .09		
5199	29 40.741	−12 25 3.35	+ .038	+ .08	+ .021	+ .89		
5202	29 50.624	+38 28 58.05	− .035	− .09				
5204	12 30 11.087	+41 45 53.46	− .003	+ .38	− .010	+ .53	+0.064	+0.01
5205	30 17.465	+70 12 5.40	+ .037	+ .40	+ .006	+ .23	+ .028	+ .20
5206	30 26.643	−22 58 56.02	+ .035	− .19	+ .011	− .08	+ .049	− .41
5207	31 6.916	+23 2 31.25	− .001	− .02	+ .002	+ .70	+ .035	+ .02
5209	31 22.098	+18 47 23.29	− .035	+ .52	− .057	+ .59	+ .038	+ .24
5213	12 32 17.965	+46 11 36.39	− .043	+ .07				
5215	32 55.448	− 5 25 7.15	+ .016	+ .16	− .027	+ .67	+ .019	− .03
5226	34 32.834	+ 2 16 2.83	+ .007	+ .34	+ .020	+ .97		
5228	34 49.475	−17 50 18.07	− .036	+ .21				
5231	35 9.937	+41 17 13.44	+ .020	+ .24	− .020	+ .85	+ .039	− .16
5235	12 35 22.400	− 7 34 58.79	+ .017	+ .20	− .009	+ .66	+ .045	− .18
5236	35 23.495	+21 28 29.44	− .016	+ .33	− .050	+ .67		
5253	37 51.507	− 1 2 17.91	+ .017	− .57	− .020	+ .31	+ .049	− .31
5258	38 5.297	+10 38 55.53	− .018	+ .14	− .045	+ .63	+ .032	+ .12
5262	38 17.732	+63 7 28.69	+ .043	+ .41	− .029	+ .20	+ .089	+ .27
5263	12 38 40.325	+34 6 6.78	− .045	+ .23				
5274	40 0.390	−27 54 45.14	− .007	+ .10	+ .017	+ .57	+ .053	+ .04
5277	40 20.161	− 2 25 54.68	+ .021	− .20				
5283	41 49.694	+ 8 4 59.93	− .017	+ .12	.000	+ .53	+ .042	+ .25
5288	42 31.478	+81 1 55.12	− .165	+ .07				
5297	12 43 54.201	−24 26 35.71	− .005	+ .16				
5298	44 2.220	+ 3 58 55.37	− .024	+ .19	− .025	+ .67	+ .025	+ .21
5301	44 26.150	−27 11 13.40	+ .011	− .23	− .033	+ .66		
5314	45 38.241	+27 57 37.72	− .045	+ .14	− .072	+ .31		
5320	46 36.673	−33 35 26.07			− .004	+ .81		
5329	12 48 2.805	+27 56 54.85	− .028	+ .15	− .026	+ .75	+ .026	+ .23
5335	48 26.483	+83 49 31.80	− .120	− .16	− .197	− .05		
5333	48 28.483	+17 28 53.84	− .028	+ .26	+ .001	+ .44		
5336	48 33.993	+83 49 13.90	+ .018	− .13	− 027	+ .10	+ .050	− .01
5341	50 2.629	−17 37 50.76	− .035	− .03				
5342	12 50 3.923	+12 49 33.31	+ .003	+ .45	− .037	+ .31		
5344	50 10.182	+36 8 42.10	− .030	− .13				
5346	50 27.017	− 9 7 54.34	− .007	+ .45	− .007	+ .70	+ .045	+ .45
5347	50 44.105	+56 21 59.91	− .017	+ .18	− .013	+ .07	+ .046	− .46
5351	51 48.146	+ 0 27 42.02	+ .018	+ .74				
5352	12 51 49.471	+ 3 48 17.08	− .017	+ .41	− .007	+ .58	+ .029	− .08
5353	51 56.470	−14 55 15.53	+ .011	− .79				
5359	52 29.752	+65 50 42.37	+ .011	+ .20	+ .010	+ .22	+ .045	+ .31
5358	52 31.245	+38 43 23.34	− .095	+ .65	− .078	+ .76	− .013	+ .35
5362	53 0.657	+54 30 18.40	− .019	+ .31	− .018	+ .36		
5363	12 53 10.999	+43 57 27.43	− .051	− .17				
5370	54 42.606	− 6 32 36.19	+ .023	+ .38				
5377	55 47.570	− 3 24 27.37	− .027	+ .19	− .057	+1.05		
5382	56 34.400	+75 52 36.12	+ .060	+ .27				
5384	56 50.872	+32 11 0.54	− .035	+ .16				
5388	12 57 30.929	+56 46 13.53	− .015	+ .62	+ .098	+ .96		
5394	58 26.589	+11 21 42.91	− .020	+ .32	− .025	+ .24	+ .036	− .25
5402	12 59 20.213	+23 2 26.66	− .054	+ .85				
5406	13 0 2.441	− 3 15 36.12	+ .003	+ .43	+ .042	+ .26	+ .050	+ .08
5419	1 54.431	−13 42 36.12	− .046	− .78				
5422	13 2 14.106	+36 11 59.51	− .089	− .10	− .104	+ .56	− .017	+ .02
5425	2 29.964	+45 40 9.37	− .046	+ .26	− .149	− .40		
5426	2 43.423	−35 27 33.59			+ .070	+ .56		
5428	3 31.848	+28 1 37.01	− .056	+ .58	− .018	+ .89		
5440	5 0.611	−22 43 2.85	− .005	− .65	− .016	+ .48		

5253 4. C. of g.

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
5441	13 5 2.782	+ 5 37 15.89	−0.015	+0.42				
5448	6 3.882	− 5 8 20.25	+ .017	+ .10	+0.008	+0.50	+0.045	−0.17
5449	6 6.603	+17 14 53.63	− .037	+ .17				
5455	6 36.685	+38 53 50.11	− .030	+ .77	− .033	+1.12	+ .042	+ .23
5458	6 56.399	+62 37 41.94	+ .008	+ .24				
5462	13 7 34.211	−26 9 11.83	+ .045	− .14	− .006	+ .47		
5467	8 22.460	+28 15 28.75	− .040	+ .52	− .039	+ .54	+ .028	+ .29
5482	11 23.130	+73 11 46.32	+ .011	+ .14				
5489	11 43.887	+80 52 5.10	+ .009	− .26	− .328	+ .06	+ .081	− .18
5490	12 9.780	+41 15 3.28	− .004	+ .27	+ .047	+1.10	+ .046	+ .43
5492	13 12 42.880	−31 6 34.99			+ .029	+ .28	+ .070	− .60
5493	12 53.946	+20 10 49.28	− .009	+ .56				
5494	13 3.119	+ 9 48 56.35	− .026	+ .67	− .030	+ .27		
5498	13 48.607	− 8 20 13.88	+ .026	.00				
5499	13 48.909	+ 5 51 52.52	+ .006	.00	+ .017	+ .22	+ .038	+ .02
5501	13 14 10.899	+40 58 1.48	− .044	− .19	− .024	+ .86	+ .025	+ .03
5506	14 28.662	−17 53 40.31	+ .010	− .56	− .009	+ .71	+ .020	− .01
5507	14 50.389	−22 46 34.41	− .050	+ .03	− .034	+ .41	+ .013	+ .28
5510	15 3.095	+ 4 4 55.97	− .004	+ .32				
5515	15 37.378	+35 31 17.62	− .033	+ .15				
5522	13 16 57.402	+40 32 37.93	− .045	+ .36	− .025	+1.02	− .002	+ .19
5538	19 53.451	−20 31 59.40	− .007	− .84				
5546	20 54.550	+55 18 59.60	− .024	.00	− .032	− .05	+ .058	− .18
5549	21 14.347	−10 46 13.28	− .010	− .21	− .017	+ .14	+ .028	− .19
5555	21 59.906	+15 57 14.75	− .061	+ .58				
5558	13 22 20.799	− 0 48 10.35	+ .011	+ .21				
5562	22 45.268	−12 19 4.72	+ .033	− .49	+ .011	− .41	+ .064	− .45
5568	24 13.286	+72 46 50.44	+ .106	+ .36	+ .005	+ .26	+ .079	− .06
5573	24 45.667	+14 10 43.94	− .036	− .13	− .016	+ .42	+ .033	− .02
5575	24 50.675	+31 32 14.56	− .042	+ .24				
5577	13 24 58.830	+53 8 2.91	− .039	− .07				
5581	25 42.129	+60 19 58.46	+ .011	+ .51	+ .056	+ .55	+ .096	+ .40
5583	26 14.371	+ 7 33 57.16	+ .006	− .09				
5589	27 29.225	+26 46 35.47	− .044	+ .48				
5591	27 59.920	−18 20 33.46	+ .028	− .26	− .026	+ .73	+ .043	+ .53
5600	13 28 24.924	−28 18 24.45	− .024	− .80	− .017	+ .09		
5605	29 0.889	− 9 46 44.55	− .002	+ .42	− .013	+ .52		
5617	30 52.177	− 0 12 46.82	− .020	+ .37	− .020	+ .24	+ .024	− .14
5619	31 14.399	+55 43 56.71	+ .015	+ .13	− .066	+ .25	+ .019	+ .54
5620	31 23.494	+49 23 56.67	− .028	+ .22	− .084	+ .70		
5623	13 31 26.911	+37 33 58.31	− .098	+ .55	− .075	+ .57	− .040	+ .15
5628	32 2.607	+44 34 48.08	− .039	+ .46				
5635	33 55.366	+ 2 45 51.26	+ .031	+ .49				
5638	34 7.759	+36 40 33.56	− .068	+ .60	− .058	+ .87	+ .025	+ .19
5642	34 28.233	+22 54 37.93	− .041	+ .19				
5646	13 35 22.724	+71 37 24.99	+ .004	+ .19	− .035	+ .13	+ .116	+ .31
5651	35 52.637	+11 7 36.17	− .030	− .04	− .051	+ .20		
5652	35 55.872	−16 3 58.68	− .007	− .16				
5662	37 22.251	−23 4 15.50	+ .007	−1.09				
5666	37 40.367	− 8 19 30.40	− .013	+ .25	− .006	+ .12	+ .026	− .23
5667	13 37 53.721	+55 3 38.84	− .009	− .25	.000	+ .11		
5675	39 9.871	+65 12 2.62	− .037	− .21	− .054	− .30		
5676	39 22.894	+35 21 59.04	− .114	+ .40				
5681	39 59.954	− 5 7 18.34	+ .020	− .50	− .007	+ .12		
5685	40 26.814	−15 48 8.51	+ .022	− .22	+ .013	+ .16	+ .075	+ .12
5691	13 41 25.173	−32 39 54.23			− .022	+ .04	+ .027	− .40
5693	41 56.314	−12 3 4.48	− .001	+ .01	.000	+ .25		
5696	42 33.688	−35 52 37.37			+ .050	− .66		
5698	43 14.365	+26 4 40.80	− .014	+ .52	− .044	+ .44		
5702	43 41.855	+17 49 48.17	− .040	+ .56	− .025	+ .75	+ .021	+ .10
5708	13 44 23.925	+83 7 44.30	−0.157	−0.39	−0.305	−0.20	−0.146	−0.49
5706	44 35.205	+49 41 13.82	− .049	+ .20	− .063	+ .43	+ .014	− .07
5712	45 47.561	−17 45 39.81	+ .055	+ .36	− .001	+ .63	+ .055	+ .36
5713	45 51.134	−28 42 30.94	− .006	− .82				
5714	46 0.587	+ 8 46 49.91	− .026	+ .06				
5718	13 46 31.443	+19 0 4.91	− .022	+ .60				
5726	47 19.073	+61 51 46.50	− .020	+ .05				
5731	48 35.205	+40 2 24.15	− .030	+ .30				
5736	49 14.454	+65 5 36.36	− .051	+ .05	− .055	+ .03	+ .035	+ .49
5747	51 6.777	+18 46 23.25	− .037	+ .34	− .043	+ .53	+ .026	+ .21
5751	13 51 49.658	− 9 11 33.22	+ .020	− .17				
5754	52 13.072	+14 25 23.79	− .025	+ .23				
5758	52 38.490	+ 1 25 0.33	− .018	− .19	− .023	− .33	+ .021	− .07
5761	52 50.812	+32 23 53.25	− .071	+ .32				
5772	54 18.340	−24 36 24.43	− .042	−1.17	− .038	+ .21	+ .031	− .34
5776	13 55 8.065	+22 3 41.63	− .024	+ .48	− .035	+ .25		
5781	55 47.794	−24 38 42.15	− .044	−1.10	− .017	+ .31	+ .007	− .14
5783	55 55.952	− 3 11 6.11	+ .023	+ .62	− .037	+ .42		
5796	57 46.374	+27 44 53.50	− .058	+ .07	− .087	+ .41	− .022	− .22
5797	57 49.656	+ 1 54 24.82	− .008	+ .12	− .030	+ .40	+ .025	− .02
5801	13 58 58.844	−17 0 22.11	− .008	− .72				
5807	13 59 41.807	−22 3 42.27	− .012	+ .32				
5809	14 0 9.774	+ 5 15 38.68	− .023	− .60				
5810	0 12.278	+51 19 55.10	− .064	+ .05	− .017	+ .42		
5812	0 23.124	−14 36 42.98	− .033	− .45	− .027	+ .16		
5825	14 2 5.684	−26 19 18.12	− .035	− .30	− .048	+ .82	+ .003	− .31
5826	2 15.694	−36 0 5.77			− .025	+ .74	− .015	+ .22
5827	2 19.292	− 8 32 4.01	+ .003	− .16	+ .010	+ .24	+ .023	− .90
5828	2 21.423	+64 44 2.42	− .032	+ .01	− .053	+ .30	+ .025	+ .40
5830	3 0.033	+18 16 10.09	− .040	+ .03				
5832	14 3 17.672	+38 46 28.59	− .032	+ .13				
5842	4 55.910	+44 12 38.51	− .026	+ .28	+ .026	+ .60	+ .065	+ .04
5845	5 29.191	+49 48 43.31	− .052	+ .01	− .129	+ .88		
5848	5 51.565	−30 15 58.65						
5856	6 58.649	+25 26 46.79	− .086	+ .08	− .075	+ .57	+ .021	− .02
5865	14 8 27.902	−26 54 32.22	+ .016	−1.75	+ .017	+ .85		
5870	8 53.500	− 9 55 31.08	− .035	.00	− .023	+ .53	+ .026	+ .06
5874	9 6.899	+77 53 59.82	+ .145	+ .31	− .012	+ .35	+ .101	+ .36
5886	10 40.040	+69 47 3.81	− .065	+ .53	− .002	+1.14		
5887	11 6.077	+ 3 41 8.25	− .014	+ .20				
5889	14 11 12.429	+22 13 21.94	− .044	− .36				
5895	12 4.738	− 5 38 35.84	− .009	+ .14	+ .009	+ .25	+ .030	− .04
5896	12 14.371	+19 34 20.19	− .048	+ .30	− .040	+ .54	+ .018	+ .03
5903	13 30.578	+51 42 45.69	− .057	+ .40	− .066	+ .37	+ .023	+ .02
5904	13 31.982	+46 25 55.88	− .044	− .27	− .029	+ .[illegible]	+ .051	− .04
5905	14 13 34.476	+57 2 18.70	− .051	+ .38				
5908	14 1.581	− 7 11 28.33	+ .034	+ .84				
5913	14 29.150	−18 22 9.94	− .020	− .05	− .029	+ .22		
5917	15 2.877	−13 1 35.80	+ .012	− .21	− .003	+ .21	+ .031	− .02
5923	15 38.410	+13 20 58.29	− .081	− .35	− .054	− .13		
5927	14 15 57.599	+42 21 3.68	− .049	− .39				
5931	16 51.823	+30 46 22.22	− .032	− .13				
5934	17 49.604	−34 26 40.90			+ .020	+ .34		
5944	19 23.279	−11 22 19.61	− .002	+ .28	− .003	+ .63	+ .043	+ .40
5950	20 18.956	+ 8 35 2.69	+ .007	+ .02				
5951	14 20 31.557	−24 27 59.84	− .010	− .02	+ .041	+ .76		
5959	21 13.602	−13 0 52.12	− .012	− .08				
5966	22 38.619	+52 11 49.04	.000	+ .15	− .012	+ .60	+ .054	+ .21
5969	22 57.993	+19 33 48.23	− .040	+ .28	− .028	+ .57	+ .038	+ .10
5975	23 46.568	−29 9 19.31	+ .053	+ .23	+ .029	+ .46	+ .097	− .10

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
5980	14 24 20.108	− 1 53 33.55	0.000	−0.58	−0.060	−0.14	+0.001	−0.48
5985	24 46.068	−28 46 45.54	− .023	− .86				
5988	25 10.025	+36 31 54.28	− .061	+ .31				
5989	25 15.134	+28 37 30.95	− .041	− .05				
5994	26 1.258	+50 10 48.14	− .057	+ .34	− .024	+ .79	+ .051	+ .38
6000	14 26 39.422	+42 8 1.69	− .070	− .63				
6005	27 39.710	+76 1 46.05	− .019	+ .09	− .077	+ .23	+ .073	+ .24
6009	28 35.819	+30 41 59.76	− .055	− .11	− .052	+ .43	+ .017	+ .03
6012	29 3.456	+38 38 8.32	− .063	− .07	− .055	+ .32	+ .015	− .19
6013	29 7.974	+22 35 22.61	− .020	+ .49	− .016	+ .72	+ .049	+ .35
6019	14 29 40.496	+60 33 20.54	− .078	+ .15	− .082	+ .21	+ .014	+ .25
6026	31 24.848	+30 4 12.74	− .045	− .16	− .068	+ .40	+ .013	− .02
6033	31 59.787	+81 8 35.25	− .200	− .08				
6030	32 0.626	+65 43 21.42	− .125	+ .05				
6029	32 2.290	+49 41 41.30	− .064	+ .17	− .014	+ .11		
6037	14 32 43.463	+23 34 33.86	+ .010	− .06				
6038	33 0.188	−11 59 14.64	− .020	− .24	− .015	− .11		
6042	33 40.781	+ 2 36 13.06	− .015	+ .40				
6059	35 52.401	+54 20 49.10	− .049	+ .45	− .048	+ .38		
6061	36 2.727	+44 43 39.70	− .086	+ .13	− .026	+ .56	+ .023	+ .19
[illegible]	14 36 24.598	−35 48 47.74			− .034	−1.31		
6067	37 12.028	+16 44 20.65	− .039	+ .43	− .030	+ .50	+ .042	− .12
6069	37 33.905	+14 2 57.12	− .091	− .10	− .091	+ .25	.000	− .37
6076	38 7.247	+11 58 58.87	− .026	+ .91	+ .007	− .25		
6078	38 32.379	−18 59 34.59	− .017	− .24				
6081	14 39 3.831	−34 51 6.11			+ .032	+ .18	+ .040	− .28
6082	39 6.297	− 5 19 58.61	+ .015	+ .08	− .019	+ .29	+ .034	+ .08
6090	40 7.552	+26 50 45.26	− .027	− .09	− .040	+ .20	+ .042	− .45
6091	40 14.840	− 7 56 10.49	− .024	+ .07				
6100	41 42.657	+27 23 22.88	− .055	+ .29	− .049	+ 68	+ .029	+ .05
6101	14 41 48.142	−22 50 11.18	− .009	+ .14				
6105	42 5.412	+33 6 19.31	− .059	+ .02				
6107	42 27.301	+ 2 12 29.29	− .013	+ .16	− .023	+ .69	+ .032	+ .12
6108	42 33.846	+15 26 46.17	− .019	+ .11				
6113	43 21.805	−25 46 26.32	+ .001	− .34	+ .016	− .16		
6125	14 45 2.775	− 0 32 10.93	− .011	+ .01				
6126	45 12.148	−13 50 14.48	− .049	− .54	− .051	+ .51	+ .044	− .69
6135	46 10.005	+38 7 10.73	− .052	+ .32	− .053	+ .42	+ .020	+ .47
6139	46 32.068	−15 41 10.69	+ .020	− .60	− .007	+ .48	+ .021	+ .06
6140	46 43.545	−15 43 51.69	− .004	− .36	− .006	+ .36	+ .035	− .17
6142	14 46 44.617	+28 55 32.72	− .035	+ .40	− .034	+ .57		
6146	47 31.955	+37 34 44.66	− .071	+ .32	− .036	+ .59		
6150	47 55.619	+19 24 41.57	− .028	+ .05	− .013	+ .58	+ .072	+ .15
6151	48 4.685	−30 16 7.87			+ .042	− .21		
6160	49 32.055	+59 35 53.91	− .009	+ .50	+ .030	+ .68	+ .066	− .06
6162	14 49 57.037	+ 6 32 50.25	+ .025	− .58				
6164	50 18.364	−11 35 35.59	+ .022	− .36	+ .028	+ .64	+ .044	.00
6172	50 54.411	+74 27 43.65	+ .103	+ .03	+ .014	+ .50	+ .107	+ .33
6171	51 8.160	−33 33 7.69			+ .020	+1.26		
6179	52 40.727	+14 44 55.17	− .023	+ .50	− .026	+ .99	+ .020	+ .23
6178	14 52 41.713	−11 6 28.29	+ .013	+ .06	+ .014	+ .60	+ .031	+ .09
6182	53 4.887	−21 4 41.24	− .001	− .61	− .051	+ .54	+ .009	− .06
6187	53 10.161	+41 26 17.05	− .050	+ .21				
6191	53 40.796	+21 51 25.56	+ .018	− .04				
6190	53 42.366	+ 0 8 1.72	+ .017	− .14	− .016	+ .40		
6192	14 53 53.367	−17 3 50.41	+ .006	− .66				
6197	54 43.429	+14 20 13.67	+ .004	− .18				
6207	55 16.250	+82 49 15.56	− .041	− .29	− .240	+ .30	+ .192	− .24
6212	56 23.131	+66 13 51.13	− .006	+ .11	− .002	+ .09	+ .090	+ .07
6213	56 57.750	− 8 13 19.95	+ .010	− .03	+ .024	+ .34	+ .050	+ .40
6222	14 58 3.623	− 8 2 59.76	+0.014	−0.13				
6229	59 7.204	+40 41 8.47	− .022	+ .11	−0.032	+0.60	+0.025	−0.04
6230	14 59 40.535	−24 59 17.46	+ .029	− .57	− .004	+ .47	+ .039	− .04
6234	15 0 20.300	+72 3 30.28	− .023	+ .09	− .125	+ .24		
6246	1 7.656	+87 31 18.15	− .140	+ .07	− .224	+ .21	+ .484	+ .05
6237	15 1 13.838	+27 14 21.56	− .047	+ .19	− .056	+ .83	+ .022	+ .20
6238	1 18.959	+47 56 44.38	− .008	+ .18	− .047	+1.01	− 274	−1.23
6240	2 7.215	−21 44 27.59	+ .003	− .23				
6242	2 27.199	−12 37 2.21	+ .004	− .66				
6248	2 56.736	+48 26 24.75	− .060	+ .36	− .058	+1.01		
6253	15 3 54.014	+18 43 50.85	+ .002	+ .42				
6255	3 56.939	+ 5 47 10.02	− .027	− .02				
6258	4 0.317	+25 9 37.97	− .068	+ .44	− .089	+1.03	+ .001	+ .37
6263	5 9.458	+26 35 16.69	− .034	+ .67	− .014	+1.39		
6265	5 16.950	+33 59 33.37	− .035	− .06				
6269	15 5 38.168	− 5 6 30.20	+ .017	− .08				
6271	5 52.197	−26 2 52.19	+ .038	−1.08				
6272	5 56.622	+50 20 28.69	− .065	+ .34				
6276	6 24.480	+63 24 10.61	− .082	− .10				
6285	7 56.532	−19 30 32.08	+ 016	− .50	− .011	+ .25	+ .059	− .12
6298	15 10 1.310	−31 14 24.51			− .053	+1.09		
6309	11 19.207	+43 19 32.31	− .072	− .37				
6311	11 27.536	+ 5 13 0.79	− .005	− .08	− .020	+ .75	+ .037	+ .03
6317	12 28.695	+33 35 37.95	− .011	+ .21	− .050	+ .81	+ .063	+ .30
6319	12 58.075	− 9 6 25.72	− .014	+ .10	− .025	+ .64	+ .025	+ .03
6321	15 13 29.665	+37 20 39.58	− .025	− .02				
6326	13 46.158	+67 37 52.74	− .078	+ .07	− .081	+ .57	+ .087	+ .02
6329	14 17.795	+69 13 17.46	− .037	+ .30				
6333	15 2.670	+20 50 46.09	− .023	+ .35	+ .052	+ .80		
6334	15 5.958	+10 42 1.36	− .031	− .13				
6335	15 15 28.921	+ 2 2 53.35	− .024	− .39	− .022	+ .61	+ .031	− .18
6344	16 49.563	−15 16 44.08	+ .004	− .10	− .039	+ .64		
6346	17 2.447	−35 59 25.18			+ .014	+ .78	+ .039	+ .01
6347	17 10.013	− 6 20 36.17	+ .002	− .30				
6349	17 12.786	+ 0 59 13.27	+ .006	− .36	+ .023	+ .10		
6355	15 18 27.930	−26 25 16.63	+ .035	− .14				
6357	18 50.579	−14 52 2.27	+ .005	+ .12	+ .002	+ .98	+ .026	+ .14
6363	19 45.150	−12 6 10.06	+ .048	− .26	+ .014	+ .69		
6366	19 51.571	− 0 45 21.11	− .018	− .37	− .005	+ .20		
6367	20 6.306	+30 33 27.94	− .044	− .23	− .032	+ .34	+ .011	+ .37
6373	15 20 50.002	+72 6 3.26	+ .029	− .01	− .095	+ .37	+ .081	+ .16
6378	21 39.342	+37 38 21.86	− .075	+ .42	− .044	+ .41	− .005	+ .33
6380	22 18.573	+15 41 27.26	− .006	+ .20	− .026	+1.11	+ .017	+ .22
6385	23 15.448	+59 13 42.44	− .049	+ .76	− .073	+ .82	+ .025	+ .56
6388	24 1.387	−16 27 21.52	+ .013	+ .06	− .014	+ .79	+ .040	+ .14
6391	15 24 25.249	+25 21 42.39	− .039	+ .20	− .041	+ .90		
6394	24 44.135	+29 21 48.48	− .030	+ .41	− .055	+ .74	+ .032	+ .27
6407	26 15.901	−20 28 17.68	+ .010	− .95				
6414	27 0.522	+55 27 4.39	− .017	+ .23				
6412	27 8.755	−32 37 32.97						
6417	15 27 16.864	+ 8 50 4.95	+ .006	+ .35				
6418	27 20.637	+31 32 31.93	− .058	+ .22				
6427	28 14.023	+41 5 16.65	− .054	− .03	− .054	+ .34	− .005	− .29
6429	29 5.805	+41 9 11.29	− .042	+ .06	− .025	+ .13	+ .003	+ .37
6433	29 54.215	+31 36 41.29	− .068	− .27	− .060	+ .78	+ .027	+ .49
6434	15 30 4.542	− 9 48 30.63	− .010	− .19	− .003	+ .56	+ .036	− .15
6446	31 19.634	−14 32 25.95	+ .009	− .30	− .026	+ .10	+ .032	− .30
6447	31 30.673	+26 57 58.56	− .045	+ .37	− .044	+ .72	+ .029	+ .22
6450	32 19.194	+11 30 50.87	− .007	− .40				
6452	32 28.015	−27 53 15.93	+ .029	− .35	+ .023	+ .29	+ .065	.00

6150. C. of g.

6238. C. of g.

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
6462	15 33 36.363	+77 35 58.88	+0.025	+0.13	−0.080	+0.17		
6469	34 2.695	−29 31 56.09	+ .010	− .49	+ .012	− .04	+0.039	−0.33
6470	34 22.522	+81 1 18.99	− .203	− .34				
6467	34 35.277	−19 3 21.11	+ .049	+ .34	− .045	+ .91		
6473	35 7.915	+40 35 48.82	− .068	+ .13	− .039	+ .75	+ .051	+ .28
6472	15 35 8.539	+22 55 8.57	− .025	− .46				
6475	35 51.997	+47 2 39.16	− .024	+ .19	− .030	+ .80		
6477	35 54.925	+34 55 7.78	− .047	+ .52				
6479	36 33.091	+36 52 42.54	− .081	+ .29	− .109	+ .07	− .028	+ .31
6486	37 37.296	−19 26 12.50	+ .038	+ .24	+ .009	+ .81	+ .054	+ .25
6487	15 37 45.729	− 6 12 16.28	− .026	− .19				
6493	38 12.327	+19 54 39.48	− .039	+ .28	+ .024	+ .55	+ .037	+ .13
6499	39 12.341	−14 48 13.27	− .039	− .32	+ .020	+ .83		
6502	39 35.516	+26 31 56.40	− .022	+ .25	− .055	+ .75	+ .054	− .14
6507	40 15.336	+ 2 45 16.44	+ .027	+ .13	− .002	− .33		
6511	15 40 34.316	+ 6 39 37.81	− .024	+ .17	− .026	+ .25	+ .031	− .25
6515	40 48.202	+52 35 49.45	− .085	+ .48	− .102	+ .77		
6516	41 17.633	+17 29 56.84	− .047	+ .34	− .048	+ .80		
6517	41 38.562	−27 49 38.55	+ .029	− .50				
6518	41 56.479	−34 26 55.58			− .013	.00		
6522	15 42 43.476	+15 39 20.04	− .023	− .09	− .045	+ .56	+ .034	+ .06
6523	42 48.124	+ 7 35 13.37	+ .011	− .44	+ .053	− .23		
6533	43 59.556	−23 36 12.99	− .065	− .67				
6539	45 0.974	− 3 35 22.76	+ .014	− .13	+ .023	+ .35		
6541	45 21.709	+18 22 20.11	− .079	+ .05	− .071	+ .82	+ .007	+ .08
6544	15 45 28.922	+28 23 9.21	− .040	+ .42	− .085	+ .27		
6548	45 31.103	+62 49 51.63	− .032	+ .08	+ .001	+ .08	+ .104	− .10
6549	45 42.230	− 3 12 6.23	+ .011	+ .05	− .012	+ .38	+ .029	+ .20
6550	46 11.254	−33 23 59.35			− .027	+ .12	+ .049	+ .32
6556	46 41.981	+78 1 33.40	+ .003	− .15	− .149	+ .02	+ .057	− .08
6554	15 47 4.521	+ 4 42 8.76	− .009	+ .05	− .021	+ .39	+ .019	− .04
6569	48 58.597	−19 56 38.76	− .011	− .90	− .007	+ .03	+ .036	− .38
6577	50 4.861	+42 39 38.51	− .048	+ .22	− .044	+ .68	+ .038	+ .34
6590	51 5.514	+83 10 33.19	+ .063	− .06	− .126	+ .03	+ .108	− .13
6586	51 16.192	+20 31 47.81	− .038	+ .58	− .078	+ .54		
6596	15 52 59.218	+15 54 19.51	− .031	+ .14	− .039	+ .74	+ .026	+ .19
6600	53 46.859	+14 37 42.55	− .012	+ .52	− .056	+ .99		
6601	54 18.599	−25 53 57.77	− .052	− .81	− .050	+ .44	+ .007	− .21
6602	54 28.886	+27 5 38.74	.000	+ .15	+ .014	+ .25	+ .047	− .15
6611	55 47.162	− 5 54 52.79	+ .016	− .12				
6614	15 55 53.693	−22 24 34.08	− .009	− .54	− .017	+ .64	+ .042	− .27
6617	56 0.529	+54 57 40.05	+ .001	+ .13	+ .041	+ .16	+ .094	+ .05
6616	56 6.866	−16 18 49.18	+ .016	− .95	− .008	+ .20	+ .063	− .31
6624	57 7.620	+ 4 38 10.43	− .022	+ .19	− .020	+ .56		
6629	57 44.985	+31 46 45.72	− .062	− .16				
6631	15 57 52.010	+18 1 28.74	− .063	+ .26	− .023	+ .57	+ .030	+ .20
6632	58 0.441	−28 55 37.90	− .010	− .56				
6635	15 58 48.417	−25 39 26.93	− .036	− .87	− .036	− .37		
6647	16 0 28.777	+58 45 54.25	− .088	− .06	− .106	− 07	+ .006	− .15
6646	0 33.837	+36 50 16.02	− .058	+ .46				
6651	16 1 4.341	−19 36 4.85	− .009	− .32	− .013	+ .52	+ .013	− .07
6655	1 47.279	+59 36 58.45	− .072	+ .38				
6666	3 26.323	−12 32 41.71	− .010	− .35	+ .006	+ .31		
6670	4 14.692	−23 29 10.89	− .012	+ .11				
6674	4 41.344	+17 14 44.69	− .029	+ .42	+ .029	+ .45	+ .049	+ .06
6678	16 5 29.484	+ 6 35 28.85	− .031	− .03				
6680	5 38.597	+45 34 40.34	− .020	− .15				
6686	6 6.717	+68 0 27.83	− .029	+ .30	− .014	+ .62	+ .031	+ .37
6685	6 13.638	+36 40 50.38	− .090	+ .87	− .043	+ .87	+ .025	+ .15
6687	6 24.285	+45 7 50.83	− .074	− .35	− .067	+ .63	+ .024	+ .08

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
6690	16 6 45.776	+41 17 23.89	−0.066	−0.01				
6691	6 58.252	+26 56 13.70	− .071	+ .38				
6693	7 37.974	−19 16 0.71	− .006	− .33	−0.016	+0.81	+0.018	+0.27
6703	9 34.019	−32 49 16.28						
6707	9 46.124	− 1 17 6.16	− .023	+ .39				
6709	16 10 24.780	− 3 30 8.44	+ .012	+ .56	− .008	+ .67	+ .029	+ .09
6717	11 29.013	+11 40 44.65	− .029	− .18				
6718	11 32.529	− 8 10 19.43	+ .016	+ .32	+ .009	+ .92		
6721	11 52.084	+34 2 51.09	− .024	+ .15	+ .009	+ .62	+ .040	+ .23
6731	12 56.421	+76 4 1.20	+ .003	− .10	− .031	+ .25	+ .158	− .21
6726	16 13 4.746	+23 18 29.47	− .087	+ .41	− .023	+ .60		
6733	13 38.599	−28 25 43.41	+ .004	−1.03	+ .043	+ .71		
6738	13 57.301	+53 25 22.21	− .056	+ .28				
6741	14 21.033	− 4 30 39.07	+ .009	+ .36	− .012	+ .41	+ .021	− .15
6747	14 24.059	+75 23 49.60	+ .019	+ .01	− .043	+ .72		
6745	16 14 47.809	−30 43 33.60			+ .050	+1.25	+ .016	+ .06
6748	14 50.513	+31 58 49.72	− .008	+ .69				
6749	15 13.968	−18 38 50.45	+ .019	− .89				
6759	16 37.538	−25 24 51.15	− .024	− .80	− .039	+ .09	+ .020	− .55
6763	17 29.082	+46 29 28.78	− .026	+ .10	− .027	+ .61	+ .021	+ .58
6766	16 18 16.348	+ 1 12 14.87	− .003	− .25	+ .033	+ .43	+ .048	− .22
6770	18 36.610	+19 19 41.70	− .050	+ .14	− .028	+ .37	+ .037	+ .08
6775	19 10.435	+31 3 54.76	− .012	+ .36	− .023	+1.34	+ .060	+ .35
6779	19 40.540	+75 55 43.28	+ .048	− .14	− .123	− .27	+ .130	− .13
6780	20 3.627	+32 30 25.90	− .042	+ .43	− .034	+ .81	+ .018	+ .48
6783	16 20 45.211	− 2 18 56.67	+ .032	− .30				
6787	21 5.097	−23 16 32.89	+ .006	− .57	+ .026	− .31	+ .065	− .82
6794	21 57.188	+14 12 17.48	− .035	− .19	− .021	+ .38	+ .046	− .18
6802	22 46.718	+55 22 30.64	− .082	+ .45	− .088	+ .42	+ .025	+ .02
6803	22 58.249	+61 41 1.11	− .058	+ .13	− .066	+ .05	+ .042	.00
6814	16 24 48.340	−26 16 1.05	+ .010	− .57	− .015	+ .33	+ .043	− .48
6818	25 32.388	−14 23 14.36	− .006	− .06	− .037	+ .96		
6821	25 32.683	+29 14 24.51	− .074	+ .02				
6819	25 36.449	−27 45 9.86	+ .009	−1.59				
6820	25 38.845	−24 57 5.41	− .006	− .38	− .025	− .20		
6825	16 26 10.264	+ 6 8 1.51	− .015	− .13				
6827	26 10.643	+42 2 45.40	− .052	+ .07	+ .004	+1.00	+ .054	+ .13
6829	26 28.633	−34 32 32.05			− .002	+ .68	+ .026	+ .24
6833	26 59.663	+21 39 7.34	− .033	+ .39	− .014	+ .56	+ .031	+ .11
6835	27 7.761	+ 2 8 49.18						
6847	16 28 7.297	+68 55 49.38	− .033	+ .06	− .016	− .14	+ .058	− .18
6845	28 17.793	+35 23 8.79	− .056	− .16				
6860	31 12.569	−28 3 42.09	− .056	− .05	− .046	+ .88	+ .007	+ .11
6862	31 21.810	+60 58 48.52	− .042	+ .24	− .015	+ .38		
6864	31 41.017	+42 35 27.53	− .026	− .07	− .033	+ .58	+ .024	− .06
6865	16 32 4.486	+17 12 39.31	− .038	+ .58				
6869	32 24.931	− 2 9 56.96	− .043	− .40	+ .003	− .12	+ .019	− .43
6874	33 1.599	−10 24 59.36	+ .005	− .52	− .013	+ .32	+ .024	− .25
6881	33 42.356	+23 1 17.67	− .020	+ .05				
6885	33 50.598	+77 35 48.22	− .153	+ .17	− .095	+ .22	+ .148	+ .16
6884	16 33 59.797	+46 45 51.95	− .046	+ .08	− .047	− .51		
6883	34 0.429	− 6 23 17.88	− .017	− .27				
6886	34 20.539	+13 50 16.38	− .018	+ .39				
6892	35 8.845	+43 42 48.53	− .030	+ .11				
6894	35 19.798	−33 35 48.41						
6904	16 36 5.908	+79 56 42.66	+ .006	− .46				
6903	36 29.338	+56 9 41.92	− .095	+ .22	+ .082	−1.01		
6905	36 42.564	+49 4 27.89	− .091	+ .23	− .108	+ .32	+ .013	+ .07
6906	36 55.172	+ 4 21 53.53	+ .015	− .25	− .002	.00		
6909	37 13.949	−17 35 53.82	+ .021	− .17	− .011	+ .37	+ .036	− .02

6721. C. of g.

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
6918	16 38 27.453	+31 44 15.58	−0.047	+0.04	−0.067	+0.27	+0.020	−0.24
6927	40 18.554	−28 22 17.08	+.027	−.83	+.067	−.84		
6928	40 19.385	+39 3 50.86	−.047	+.73	−.049	+.83	+.024	+.46
6932	41 5.585	+34 10 34.22	−.045	+.11	−.023	+.51		
6940	42 13.753	+8 43 5.73	−.001	+.04	−.020	.00		
6946	16 43 22.787	+2 11 55.10	−.025	+.23	+.046	+.80		
6949	43 52.303	+56 54 55.28	−.027	−.07	−.045	+.11	+.073	−.32
6950	44 4.774	+5 22 48.44	+.002	−.42	−.014	+.54	+.021	+.02
6954	44 53.440	−4 22 58.54	+.028	+.09				
6955	45 6.406	−21 43 19.10	+.006	−.52				
6959	16 45 18.153	−34 9 30.72			+.016	+.27	+.039	−.36
6965	45 40.941	−10 39 5.70	−.001	−.32	.000	+.56	+.030	+.13
6970	46 40.786	+7 22 33.70	−.013	−.71	−.035	−.18	+.054	−.04
6982	47 39.452	+53 2 42.27	−.070	+.63				
6980	47 43.230	+29 56 0.65	−.032	.00	−.032	+.12		
6985	16 48 39.863	+15 5 56.23	−.020	−.04	−.015	+.45	+.005	−.04
6987	49 21.749	+18 11 11.06	−.036	−.16				
6988	49 29.164	+35 36 48.49	−.079	+.50				
6994	50 7.311	+31 49 29.59	−.053	+.40	−.040	+.29	+.042	+.19
6999	50 27.474	+10 17 15.97	−.038	+.34	−.015	+.77	+.050	+.23
7002	16 50 35.053	−6 1 57.19	−.012	+.01	−.026	+.40		
7024	53 35.610	+82 9 47.23	−.114	+.09	+.005	+.04	+.092	−.03
7018	54 5.774	+13 59 53.10	−.044	+.54				
7019	54 7.014	+9 29 25.84	−.018	+.41	−.012	+.48	+.035	+.02
7026	54 35.494	+24 29 47.44	−.048	+.41				
7031	16 55 14.236	+75 30 40.64	−.015	−.03				
7034	55 36.672	+65 14 56.36	−.016	−.48	−.125	−.99		
7040	57 1.477	−32 2 0.31			+.026	+.58		
7041	57 6.189	−4 6 40.69	−.012	+.69	+.004	+.91	+.050	−.03
7046	57 25.130	+31 2 9.46	−.037	+.21	−.031	+.65	+.050	+.25
7044	16 57 27.864	−18 46 35.55	+.031	−.57	+.030	+.37		
7055	16 58 50.140	+33 40 33.29	−.050	+.16	−.040	+.61	+.013	+.19
7069	17 1 25.393	+19 42 6.18	−.029	+.12				
7070	1 42.971	−21 27 43.22	+.024	−.79	+.038	+.19		
7075	1 53.922	+12 50 34.18	−.016	+.55	−.044	+.89	+.020	+.35
7078	17 2 14.212	−26 24 45.93	−.068	−.70				
7080	2 47.805	+43 54 47.94	−.017	−.02	+.057	+.72		
7081	2 50.252	+48 54 24.37	−.079	+.18	−.095	+.61		
7091	4 21.392	−0 58 54.17	−.020	−.33	−.058	−.19		
7093	5 9.316	+31 18 10.72	−.085	+.16				
7096	17 5 19.775	+40 36 47.88	−.103	+.51	−.127	+.11	−.047	+.22
7097	5 23.232	+28 19 56.70	−.087	+.32				
7104	6 4.495	−15 38 0.26	−.002	−.38	−.007	+.30	+.027	−.30
7112	7 42.686	−14 31 44.00	−.024	−.45				
7118	8 8.153	+7 59 5.83	−.016	+.15				
7121	17 8 33.908	+65 48 25.09	−.099	+.28	−.091	+.30	+.020	+.21
7130	10 27.226	+21 31 4.71	−.057	+.42				
7132	10 43.997	−26 29 39.43	−.053	−.96	−.008	−.60	+.066	−.90
7134	11 13.592	+14 28 28.95	−.026	+.06	−.013	+.46	+.032	−.17
7136	11 33.587	−9 43 28.80	−.003	−.68				
7138	17 11 53.598	+62 57 35.13	−.023	+.52	+.020	+.42		
7137	11 56.981	+24 55 35.95	−.045	+.32	−.034	+.48	+.033	+.30
7139	12 10.787	−32 34 46.08			+.022	+.37		
7142	12 26.021	+36 53 34.28	−.036	+.65	−.031	+.60	+.044	+.30
7144	12 43.303	+1 17 34.53	−.024	−.09				
7153	17 14 24.757	+39 32 44.45	−.045	+.01				
7156	14 38.203	+33 10 47.56	−.079	−.16	−.035	+.18	+.045	−.33
7161	15 4.933	+37 22 9.55	−.106	+.69	−.055	+.98	−.021	+.49
7160	15 5.346	+10 56 40.72	−.006	−.07	+.022	+.53		
7166	15 31.273	−17 40 45.65	+.002	−.16	.024	+.58		

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
7179	17 17 22.584	+71 52 14.62	−0.038	+0.16	+0.083	+0.29		
7176	17 24.106	−24 55 33.89	+.011	−.[illegible]	−.006	+.43	+0.043	−0.19
7182	17 51.116	+32 33 47.55	+.002	+.03	−.016	+.53	+.058	−.34
7192	20 12.785	−21 22 22.66	+.007	−.63	+.026	+.13		
7202	21 5.623	+37 12 50.69	−.054	+.18	−.063	+.74	+.007	+.63
7204	17 21 47.299	−24 6 27.95	−.015	−.21	+.031	+.54	+.046	−.26
7207	22 4.212	−1 35 15.25	−.017	+.15				
7209	22 19.540	+16 26 55.00	−.060	+.28				
7210	22 33.790	−29 48 1.94	−.012	−.27	−.018	+1.02	+.055	+.02
7217	22 35.473	+50 29 33.14	−.107	+.26				
7214	17 22 39.002	−5 1 17.67	−.036	−.42	−'.037	+.26	+.026	−.04
7216	22 41.710	+7 39 36.90	−.013	+.29				
7219	22 47.519	+4 12 15.70	+.003	−.[illegible]	−.029	+.40	+.034	−.13
7218	22 50.551	−29 39 39.12	+.013	−.14				
7220	23 0.546	+26 56 33.62	+.012	+.54				
7228	17 24 44.872	+48 19 20.15	−.029	−.18	−.023	+.35	+.055	−.25
7230	24 57.205	+58 42 50.87	−.069	+.31				
7236	25 16.740	+80 12 16.15	−.021	−.07				
7244	26 50.277	−23 54 21.91	−.023	−.64	−.015	+.49		
7251	27 42.354	+26 9 58.44	−.073	+.36	−.035	+.50	+.030	+.16
7258	17 28 44.160	+52 21 23.03	−.069	+.36	−.079	+.61	+.002	+.22
7261	29 29.563	−5 41 27.24	+.037	+.61	+.020	+.97		
7268	30 36.011	−11 11 32.57	+.014	+.21	+.065	+.66		
7269	30 41.866	+55 14 6.16	+.003	+.22	−.026	+.46	+.076	+.09
7270	30 47.263	+55 13 24.74	−.026	+.39	−.070	+.25	+.102	+.12
7273	17 31 27.112	+12 36 48.62	−.037	+.11	−.025	+.54	+.030	+.03
7281	32 15.652	+68 10 58.27	+.030	−.06	−.016	−.35	+.053	−.14
7278	32 17.097	+40 57 25.10	−.071	+.09				
7279	32 21.548	+12 5 37.99	−.027	+.50				
7285	33 17.424	−15 21 9.63	−.022	.00	−.028	+.62	+.002	+.06
7286	17 33 17.943	−15 31 35.65	+.002	−.58	+.058	+.70		
7293	33 45.376	+30 49 50.00	−.078	+.75				
7295	34 25.618	+24 21 12.56	−.062	+.31	−.010	+.45		
7299	34 39.886	+48 37 42.72	−.105	−.25	+.023	+.62		
7301	35 7.761	−32 9 36.28			+.061	+.47		
7305	17 35 33.449	+3 35 53.78	−.053	+.26				
7308	35 42.689	+36 47 20.53	−.069	+.31				
7313	37 11.882	−12 50 11.55	−.014	−.18	−.028	+.17	+.036	−.30
7315	37 20.754	+46 2 44.00	−.040	+.46	−.042	+.62	−.001	+.26
7316	37 23.255	+68 47 34.14	+.002	+.42	−.011	−.01	+.072	+.17
7327	17 39 45.989	+4 35 50.79	−.019	+.32	−.019	+.66	+.034	+.03
7347	42 50.253	−27 48 12.89	−.039	−.26	−.050	+1.04	−.005	+.15
7349	43 13.665	−22 27 4.56	+.006	−.15				
7354	43 16.107	+72 11 9.82	−.060	+.25	−.003	−.03	+.084	+.04
7351	43 20.036	−14 41 56.39	−.031	−.49				
7353	17 43 31.323	+27 45 49.05	−.032	+.18	+.004	+.54	+.042	−.09
7355	43 46.370	−26 56 58.80	+.007	−1.22	+.066	+.15		
7357	43 49.359	+17 43 25.49	−.010	+.48	+.058	+1.50		
7359	44 7.868	+2 44 3.41	−.003	+.32	−.003	+.42	+.047	−.05
7368	45 46.615	+25 38 48.18	−.022	+.19	.000	+.19	+.046	−.19
7374	17 46 36.224	+9 52 13.10	−.007	+.29				
7387	48 5.515	+48 24 49.65	−.064	+.38	−.022	+.54	+.046	+.36
7390	48 6.281	+80 18 33.61	−.142	+.12				
7385	48 6.752	−1 13 7.56	+.014	−.18				
7391	48 54.685	−34 44 13.08			−.014	−.24		
7393	17 49 38.215	+39 59 51.25	−.073	.00	−.047	−.12	+.035	−.29
7399	50 53.787	−7 43 11.56	+.015	+.24				
7410	52 13.834	+56 53 2.38	−.030	+.51	−.052	+.27	+.028	+.10
7411	52 23.552	+26 3 39.70	−.063	+.57	−.051	+.65	+.025	+.15
7413	52 41.710	+22 28 28.87	+.006	+.16	−.012	+.41		

6918. C. of g.

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr Δα	W−Gr Δδ	W−Bs Δα	W−Bs Δδ	W−Ei Δα	W−Ei Δδ
	h m s	° ′ ″	s	″	s	″	s	″
7417	17 52 48.196	+76 58 25.75	−0.135	−0.35	−0.128	+0.21	+0.026	−0.05
7420	53 40.772	+37 15 34.39	− .071	+ .31	− .050	+ .17	+ .023	+ .04
7423	54 1.177	+55 58 42.14	− .024	+ .28				
7424	54 39.717	+33 24 30.19	− .053	+ .10				
7428	54 50.968	+29 15 18.40	− .065	+ .87	− .024	+1.09	+ .042	+ .47
7430	17 54 51.829	+51 29 49.59	− .043	+ .17	− .019	+ .37	+ .067	− .06
7427	54 53.808	− 9 45 56.60	− .002	− .14	− .005	+ .09	+ .024	− .16
7429	54 55.830	+14 31 1.50	− .044	+ .46				
7435	55 43.516	+62 36 54.78	− .041	+ .40				
7439	56 24.042	+52 13 25.37	− .045	− .27				
7456	17 56 25.245	+86 36 50.06	− .378	− .17	− .225	+ .18	+ .044	+ .07
7440	56 32.871	+ 4 22 18.41	− .019	+ .45	+ .001	+ .63		
7442	56 53.302	+ 2 56 2.43	+ .002	+ .42	+ .004	+ .53	+ .064	+ .26
7444	57 1.616	−17 9 19.15	+ .042	− .44	+ .008	+ .51		
7468	58 29.843	+86 59 44.74	− .227	− .30	+ .263	− .97	+ .399	− .44
7460	17 58 59.912	− 8 10 53.51	+ .024	+ .49	+ .076	+ .02	+ .142	+ .29
7466	18 0 18.111	+44 13 57.51	− .063	− .16				
7472	0 59.389	−30 25 35.00			+ .032	+ .51	+ .044	+ .06
7479	1 38.860	+39 28 33.00	− .039	+ .38				
7478	1 39.870	+ 2 30 57.29	− .006	+ .54	− .008	+1.00	+ .058	− .30
7483	18 2 41.411	−21 27 10.52	+ .022	− .74	+ .026	− .22		
7486	3 19.966	−28 28 0.68	+ .051	− .46	+ .048	+ .21		
7491	3 47.589	+ 9 33 7.32	− .007	+ .10	− .012	+ .20	+ .024	− .13
7493	3 59.218	+15 54 32.92	− .033	− .03				
7497	4 36.954	+28 45 4.32	− .033	+ .23	− .035	+ .50	+ .033	− .05
7499	18 4 43.481	− 2 55 10.72	− .004	+ .61				
7500	4 48.033	+26 5 6.39	− .045	+ .11	− .035	+ .17		
7502	5 13.889	+49 41 55.54	− .048	+ .12				
7505	5 27.859	−13 56 53.62	− .004	+ .32				
7508	5 39.599	+79 59 33.83	− .045	− .78	− .113	− .25	− .042	− .26
7509	18 5 45.664	+79 59 45.89	+ .013	− .16	+ .015	+ .27		
7507	6 3.657	+ 6 11 29.59	− .002	+ .07				
7524	9 16.693	−21 4 47.65	+ .021	− .52	+ .012	+ .16	+ .057	− .21
7544	12 49.749	−17 24 3.64	− .023	− .68				
7548	13 1.214	+30 22 23.78	− .068	+ .08				
7549	18 13 16.330	− 9 47 7.42	− .013	− .01				
7551	13 18.695	+42 7 58.51	− .083	− .31	− .065	+ .34	− .010	+ .04
7555	13 27.925	+64 22 18.02	+ .027	− .17	+ .070	− .06	+ .127	+ .08
7557	14 36.862	+13 44 51.12	− .019	+ .31				
7563	15 15.148	−35 27 38.87						
7572	18 16 5.427	+24 24 49.50	− .054	− .01	− .074	+ .02		
7571	16 11.585	−29 51 41.17	+ .040	− .35	+ .008	+ .40	+ .057	− .24
7579	17 7.329	+ 3 20 32.49	− .019	+ .38	+ .002	+1.13		
7582	17 25.703	− 2 55 10.34	− .005	+ .28	+ .008	+ .34	+ .029	− .12
7593	19 0.991	+23 14 46.14	− .018	+ .48	− .028	+ .53	+ .062	+ .09
7594	18 19 11.707	−34 25 17.94			+ .060	+ .06	+ .072	− .37
7603	20 30.059	+21 44 4.56	− .016	+ .41	− .031	+1.04	+ .030	+ .07
7609	20 53.035	−20 34 59.53	+ .026	− .09	+ .015	− .11		
7612	21 45.495	+39 27 55.71	− .058	− .08	− .035	+ .34	+ .016	− .01
7616	21 50.073	+71 17 54.01	− .063	+ .07	− .052	+ .60	+ .072	+ .16
7615	18 22 2.257	+ 7 59 19.42	− .056	.00	− .018	− .30		
7618	22 24.660	+72 42 2.71	+ .046	+ .06	+ .010	+ .22	+ .097	+ .09
7622	22 48.892	+58 45 24.56	− .028	− .10	− .040	+ .23	+ .075	− .25
7624	23 5.127	+29 47 5.12	− .060	− .25	− .024	+ .48		
7625	23 20.500	−25 27 52.41	− .056	− .40	− .041	+ .34	− .003	− .28
7626	18 23 25.373	−26 48 12.23	+ .034	−1.03				
7637	24 55.364	−14 36 54.03	− .035	− .24	− .006	+ .34	+ .041	− .28
7641	25 46.777	− 2 2 5.73	+ .021	+ .24	+ .031	+ .50	+ .043	+ .25
7644	26 9.694	−33 2 24.99			− .003	+ .29	+ .029	− .21
7650	27 16.092	−10 50 56.12	+ .002	− .64	− .004	+ .26		
7653	18 27 44.214	+16 52 32.10	−0.064	+0.96	−0.017	+0.19		
7661	28 33.998	+41 3 6.78	− .034	− .21				
7663	29 2.612	−33 4 24.76			+ .018	− .17		
7669	30 20.742	+38 46 39.50	− .084	+ .53				
7670	30 28.298	+52 3 30.88	− .079	+ .31				
7673	18 30 52.278	−11 2 13.10	− .006	− .41	− .010	+ .51	+0.037	−0.32
7676	31 5.917	+20 24 25.77	− .058	+ .37				
7675	31 7.532	− 8 17 52.06	− .008	− .06	+ .008	+ .32	+ .023	− .16
7678	31 15.933	+10 49 55.05	+ .015	+ .17				
7680	31 16.827	+56 59 15.85	− .097	+ .30	− .097	+ .12		
7681	18 31 40.493	+46 9 33.70	− .028	− .31				
7686	32 30.919	+67 43 5.04	− .016	− .30				
7693	33 20.358	+ 0 53 12.19	− .035	+ .32				
7696	33 22.872	+77 29 22.65	− .053	− .22	− .028	+ .03	+ .078	− .11
7694	33 30.213	−17 17 45.55	− .011	+ .06	+ .028	+ .21		
7702	18 34 5.519	+83 7 22.81	− .122	+ .41				
7699	34 23.892	+38 42 46.90	− .040	+ .70	− .052	+ .46	+ .011	+ .18
7710	35 59.206	+65 25 17.02	− .023	− .10	+ .058	− .07	+ .069	− .26
7718	36 52.895	+62 27 28.68	− .064	+ .11	− .161	+ .81		
7723	38 10.025	− 9 7 32.14	− .013	− .52	− .014	+ .11	+ .028	− .34
7731	18 38 51.313	+31 32 40.35	− .077	+ .47				
7734	39 26.148	− 8 21 2.35	− .033	− .23	− .029	− .12	+ .003	− .38
7740	40 12.995	−25 5 15.52	+ .021	− .77	+ .017	− .15		
7743	40 58.321	−27 4 9.09	+ .015	− .37	+ .039	+ .54	+ .066	+ .14
7749	41 49.268	−22 28 19.13	− .029	+ .41	+ .022	+ .20		
7750	18 41 51.210	+39 35 26.48	− .075	− .01	− .021	+ .33	+ .011	−1.66
7752	41 53.533	+39 32 0.55	− .040	− .58	− .112	− .36	+ .028	− .02
7755	42 26.001	+20 28 24.68	− .015	+ .59	+ .007	+ .75	+ .042	+ .03
7759	43 11.704	− 4 49 45.61	− .002	+ .12	+ .005	+ .47	+ .040	+ .01
7761	43 23.935	+18 37 29.82	− .083	+ .66				
7762	18 43 42.466	+18 5 49.03	− .074	+ .39	− .014	+ .66	+ .013	− .07
7775	45 2.515	+52 54 17.93	− .064	+ .19	− .039	+ .82	+ .010	− .12
7783	46 16.918	−13 39 35.08	+ .051	− .61				
7784	46 20.050	−22 14 57.49	+ .038	− .07	+ .065	− .06	+ .103	+ .08
7786	46 47.871	+ 7 22 16.28	+ .010	+ .21				
7787	18 46 53.785	+26 20 13.59	− .079	+ .40				
7792	47 18.576	+33 16 29.12	− .058	+ .69	− .064	+ .61	+ .008	+ .28
7793	47 25.855	− 3 24 23.96	+ .020	+ .75	+ .006	+1.49		
7797	47 51.303	−29 28 10.53	+ .034	− .70				
7804	49 4.146	+21 20 1.70	− .057	+ .19	− .033	+ .67		
7807	18 48 48.151	+75 20 46.78	− .033	− .29	− .035	− .25	+ .055	− .01
7812	50 5.751	+59 17 46.56	+ .015	+ .08	+ .003	+ .02	+ .075	− .06
7814	50 36.963	−26 23 28.49	− .007	− .79	+ .022	+ .65	+ .039	− .23
7820	51 6.326	+36 52 37.43	− .053	+ .67	+ .004	+ .36		
7819	51 11.841	−16 28 9.19	+ .020	− .25	− .003	+ .11		
7832	18 52 29.446	+ 4 6 17.33	− .003	− .18	− .013	+ .45	+ .031	− .23
7875	52 56.066	+89 1 42.41	− .997	− .08	+ .076	+ .11	− .143	+ .13
7834	53 2.759	− 5 56 41.26	+ .003	− .13	+ .013	− .24		
7836	53 3.119	+43 50 47.72	− .047	+ .25	− .065	+ .83	+ .011	+ .21
7838	53 15.403	−21 12 23.77	+ .023	− .34	+ .016	+ .21	+ .061	− 19
7839	18 53 30.292	+ 2 26 8.10	+ .034	− .02	+ .002	+ .42		
7851	55 19.337	+71 11 50.38	− .002	+ .11	− .027	+ .40	+ .083	+ .18
7848	55 20.294	+13 48 17.38	− .049	+ .26	− .026	+ .45		
7852	56 8.221	+32 35 8.84	− .070	+ .38	− .043	+ .70	+ .026	+ .16
7853	56 13.078	+14 57 55.46	− .022	+ .60	+ .013	+ .54	+ .040	+ .12
7854	18 56 19.322	+40 34 32.06	− .011	+ .37				
7864	57 50.490	−29 59 19.55	+ .019	− .40	+ .002	+ .03	+ .048	− .12
7877	59 36.227	−31 9 29.79			+ .046	+ .87		
7878	59 36.438	+19 33 2.88	− .041	+ .43				
7879	18 59 42.747	−23 0 28.53	+ .019	− .28				

7478. C. of g.

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
7892	19 1 57.750	+13 45 3.27	−0.026	+0.49	−0.014	+0.63	+0.029	+0.02
7899	2 1.902	+82 15 54.09	− .121	− .06				
7893	2 15.555	−27 46 53.43	+ .020	− .75	+ .007	+ .24	+ .053	− .37
7894	2 16.142	− 4 59 46.63	+ .005	+ .37	+ .006	+ .02	+ .044	− .24
7895	2 21.702	+45 48 25.80	− .020	− .14				
7897	19 2 42.208	− 1 27 43.54	− .002	+ .38				
7901	3 14.046	+53 16 51.25	− .059	− .13	− .032	+ .05		
7902	3 39.115	+28 30 35.22	+ .010	+ .36	+ .006	+1.32		
7905	4 35.294	+32 22 57.48	− .091	+ .40	− .057	+ .[illegible]	− .007	+ .43
7907	4 37.448	+35 58 54.28	− .042	− .07	− .036	+ .50	+ .026	+ .30
7911	19 5 18.260	−21 8 39.23	− .031	− .16	− .013	+ .14	+ .003	− .18
7912	5 19.482	+ 5 57 15.16	− .021	+ .29	− .010	+ .21		
7935	8 36.628	−26 2 2.02	+ .022	− .38	+ .098	− .17		
7936	8 36.650	− 8 3 58.63	+ .023	− .70	+ .021	− .08	+ .046	− .73
7937	8 53.342	+31 9 26.51	− .066	+ .16	− .030	+ .49	+ .025	+ .17
7938	19 9 4.003	−12 24 34.76	+ .006	− .29	+ .008	+ .41		
7945	9 29.143	+65 51 10.47	− .046	− .11	− .022	− .03	+ .045	− .41
7948	9 55.798	+ 2 9 53.99	− .006	+ .32	+ .043	+ .52	+ .029	+ .06
7953	10 15.490	+56 43 51.62	− .070	+ .49	− .018	+ .75		
7955	10 56.591	−25 23 14.12	− .006	− .16	+ .004	+ .61	+ .023	− .02
7965	19 12 3.389	+21 6 0.32	− .061	+ .73	− .082	+ .37		
7971	12 32.436	+67 31 46.96	− .075	+ .11	− .133	+ .49	− .049	+ .30
7972	12 48.296	− 4 42 5.26	− .004	+ .50	+ .006	+ .65	+ .026	+ .37
7976	13 14.897	−19 5 15.79	+ .026	− .03	+ .024	+ .35	+ .056	− .12
7978	13 45.805	+37 59 57.54	− .080	+ .30	− .034	+ .45	+ .001	− .05
7982	19 14 17.738	+11 27 32.61	− .019	.00	− .014	+ .37	+ .037	− .13
7989	15 22.165	+53 13 46.34	− .038	+ .42	− .053	+ .45	+ .019	− .01
7998	16 22.700	+37 18 21.89	− .106	+ .12				
8001	16 27.616	+40 13 16.69	− .064	− .18	+ .036	+ .30	+ .038	+ .06
8000	16 32.687	− 5 33 25.70	+ .023	+ .14	+ .017	+ .59		
8007	19 17 0.269	+73 13 0.02	− .052	− .13	− .060	− .10	+ .011	− .27
8008	17 25.971	−16 5 49.31	+ .019	+ .04	+ .007	+ .21	+ .029	− .03
8017	18 53.641	−35 6 33.76			− .006	− .04		
8023	20 17.222	+65 34 12.00	− .034	+ .09	− .066	+ .18		
8026	21 7.432	−14 2 48.93	− .018	− .32	+ .005	+ .39		
8027	19 21 10.099	+29 28 25.78	− .027	+ .74	+ .007	+ .55		
8028	21 23.630	+11 46 58.19	+ .025	+ .78	− .010	+ .67	+ .053	+ .01
8030	21 43.015	+ 2 57 50.60	− .008	+ .28	− .008	+ .33	+ .025	− .17
8031	21 50.882	−21 55 35.06	+ .021	− .01	+ .083	+ .03		
8034	22 12.212	−29 53 33.95	− .023	− .85	+ .005	+ .84	+ .015	+ .27
8035	19 22 19.485	+24 46 35.18	− .027	+ .26	− .011	+ .28	+ .034	− .14
8040	23 11.757	+19 44 29.02	− .062	+ .26	− .004	+ .68		
8043	23 26.985	+36 9 59.93	− .061	+ .22	− .074	+ .63	+ .016	+ .42
8045	23 39.277	+44 46 53.20	− .064	+ .56				
8050	24 15.147	+76 24 42.16	+ .002	− .17				
8054	19 24 49.638	+83 19 10.86	− .261	− .04				
8053	25 13.975	−27 8 25.45	+ .017	+ .10	+ .081	+ .69		
8055	25 27.666	+ 0 5 27.15	− .002	+ .31				
8052	25 34.535	+62 24 11.71	− .044	+ .38				
8056	25 35.009	+24 30 43.52	− .055	+ .34	− .044	+ .61	+ .019	+ .19
8058	19 26 15.404	+79 27 13.58	− .171	− .46	− .371	− .01	− .160	− .39
8067	26 41.523	− 2 56 46.88	+ .007	+ .42	+ .046	+ .22	+ .056	+ .07
8072	27 28.481	+33 51 15.68	− .037	− .09				
8074	27 41.761	+27 48 4.32	.029	+ .17	− .017	+ .44	+ .030	+ .13
8075	27 48.854	+51 34 9.71	− .148	− .03	− .006	+ .37	+ .020	+ .01
8077	19 28 1.419	+ 5 36 33.21	− .002	+ .53				
8088	28 59.012	+34 17 33.60	− .052	+ .28	− .027	+ .47	+ .039	+ .19
8094	30 25.521	+ 7 13 7.38	− .008	+ .46	− .019	+ .38	+ .030	+ .25
8102	31 36.750	+70 49 35.75	− .024	− .15				
8104	32 8.710	−25 3 1.73	− .022	− .49	− .021	+ .07	+ .014	− .44
8106	19 32 31.843	+48 0 1.60	−0.087	+0.16				
8107	32 42.370	−18 23 56.24	+ .052	− .47	+0.051	+0.63		
8109	32 51.423	− 7 11 43.40	− .035	+ .48	− .012	+ .11	+0.027	+0.05
8118	33 52.788	+21 50 13.22	− .036	+ .54				
8119	33 53.687	+16 17 36.05	− .016	+ .69	− .003	+ .37	+ .051	+ .21
8122	19 34 25.757	+50 2 48.18	− .079	− .02	− .023	+ .43	− .002	− .19
8125	35 3.683	+ 3 12 35.86	− .001	− .05				
8130	35 29.545	+ 5 13 32.80	− .003	− .21	− .007	+ .09	+ .049	− .17
8135	36 25.651	−16 27 59.13	− .012	− .31	− .015	+ .49	− .001	− .40
8139	36 59.975	+42 38 38.61	− .045	− .54	− .017	+ .07	+ .040	− .40
8140	19 37 0.048	+54 47 51.10	− .040	+ .19	− .055	− .04		
8147	37 40.810	+17 18 4.48	− .014	+ .73	+ .014	+ .41	+ .038	− .21
8152	38 13.799	−16 18 3.43	− .019	− .80	− .008	+ .60	+ .003	+ .03
8154	38 41.701	+12 0 58.21	− .017	+ .44	− .004	+ .36		
8171	40 35.735	+25 35 29.29	− .065	− .14	− .038	+ .51	+ .026	+ .03
8174	19 41 14.328	−32 5 26.15			+ .074	+1.16		
8177	41 34.198	+37 10 20.33	− .099	− .03	− .066	+ .07	− .016	+ .28
8181	41 59.311	−19 56 33.35	− .042	+ .03	− .019	+ .85	+ .003	+ .09
8187	42 37.827	+44 56 48.99	− .023	+ .10	− .040	+ .44	+ .041	− .15
8185	42 41.638	+10 25 46.00	− .023	+ .30	− .008	+ .39	+ .027	− .10
8194	19 44 2.577	+18 20 53.83	− .050	+ .32	− .015	+ .51	+ .022	+ .26
8197	44 30.966	−28 58 29.18	+ .037	− .76				
8199	44 39.942	+25 11 51.83	− .044	− .37				
8208	45 38.875	+18 57 10.64	− .032	+ .06	− .023	+ .33	+ .040	− .19
8212	46 39.146	+ 7 42 43.66	− .012	.00				
8211	19 46 39.274	−10 57 17.94	− .012	− .36	− .020	+ .14	+ .021	− .14
8218	47 7.452	+ 8 40 9.05	− .019	+ .45	− .001	+ .37	+ .034	− .21
8225	48 26.105	+70 4 37.07	− .011	− .02	− .047	+ .18	+ .050	− .11
8224	48 39.155	+ 0 48 43.51	− .014	+ .25	− .019	+ .42	+ .021	+ .13
8232	49 23.063	− 3 18 35.50	− .003	− .10	− .020	+ .39		
8234	19 49 48.386	−24 7 43.30	− .017	+ .26	− .015	+ .42		
8239	50 34.133	− 8 25 25.63	+ .057	+ .26	+ .027	− .14		
8244	50 57.449	+34 23 13.70	− .050	− .25				
8245	51 5.482	+41 9 33.80	− .047	+ .07				
8248	51 37.749	+ 6 13 6.03	− .008	+ .35	+ .010	+ .28	+ .028	− .14
8255	19 52 41.152	+11 13 25.01	+ .032	+ .07	+ .078	+ .25	+ .066	+ .15
8258	53 29.490	+34 52 59.72	− .019	− .08	− .027	+ .60	+ .018	− .22
8260	53 41.456	+52 14 21.09	− .051	− .03	− .002	.00	+ .057	− .32
8259	53 41.872	−15 41 29.97	− .030	− .38	− .007	− .33	− .001	− .25
8264	54 29.620	+58 38 42.45	− .021	− .07	− .032	+ .23		
8266	19 54 51.554	−35 28 49.28			+ .010	−2.35	+ .060	− .40
8273	55 25.273	+19 17 14.97	− .013	+ .58	− .001	+ .78	+ .033	− .10
8274	55 33.908	+ 1 10 17.26	+ .006	− .08				
8275	55 38.759	+11 6 2.66	+ .022	+ .15				
8279	55 57.400	+22 53 46.49	+ .003	+ .29	− .011	+ .08		
8295	19 58 0.649	+27 32 43.34	− .021	+ .36	− .013	+ .21	+ .021	− .07
8294	58 2.971	−27 55 10.52	+ .003	− .31	− .003	+ .46	+ .033	− .24
8305	19 59 34.450	−32 16 4.96			+ .040	− .31		
8307	20 0 28.497	+ 7 3 55.14	− .040	+ .56	− .036	− .02	+ .007	− .02
8310	0 32.330	+29 41 44.53	+ .006	+ .66	− .006	+ .08		
8308	20 0 33.425	−21 31 35.31	+ .024	+ .14	+ .002	− .35		
8309	0 37.630	−27 1 35.63	− .004	− .69				
8317	1 49.864	+19 46 30.41	− .016	+ .37	+ .005	+ .10		
8321	2 14.113	+48 0 56.02	− .032	+ .05				
8320	2 15.100	− 4 17 34.18	+ .015	+ .48				
8328	20 3 34.520	+35 45 53.78	− .054	− .26	− .048	− .05		
8329	4 13.518	+ 9 10 51.64	− .016	+ .53				
8330	4 21.384	+61 46 38.54	− .037	− .05	− .072	+ .04		
8345	6 38.422	+36 37 4.86	− .045	+ .49	− .026	+ .49	+ .032	+ .08
8351	7 26.147	− 1 2 42.11	+ .006	+ .01	− .004	+ .22	+ .025	− .16

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
8357	20 8 15.215	−12 50 18.05	+0.007	−0.09	+0.007	+0.14		
8363	8 51.961	+26 15 14.23	− .019	+ .14	+ .022	+ .63	+0.070	−0.10
8368	9 21.538	− 1 14 6.61	− .015	+ .09	+ .015	− .14	+ .017	− .25
8372	10 21.313	+61 51 4.16	− .082	+ .34	− .133	+ .23	+ .096	+ .30
8373	10 26.539	+51 14 13.94	− .036	− .08	− .059	+ .62		
8380	20 10 29.797	+84 27 9.39	− .150	− .85	− .173	−1.04	+ .044	−1.00
8376	10 36.910	+68 2 48.06	− .027	− .02				
8375	10 48.381	+14 58 5.33	− .029	+ .70	+ .003	+ .68	+ .047	− .05
8377	10 56.536	+46 35 16.95	− .039	− .10	− .063	+ .45	+ .038	− .13
8379	11 16.150	+46 30 47.53	− .032	+ .06	− .031	+ .38	+ .026	+ .21
8384	20 11 26.773	+77 29 10.83	− .013	+ .37	+ .003	+ .34	+ .080	+ .33
8383	11 39.286	+56 20 15.97	− .071	+ .07	− .027	+ .08	+ .017	+ .12
8388	12 22.160	+ 4 21 3.81	+ .010	+ .15				
8398	13 29.592	−12 44 28.15	+ .047	− .01	+ .058	− .15	+ .072	− .24
8401	13 34.469	+24 26 20.99	− .045	+ .40	− .036	+ .44	+ .026	− .19
8399	20 13 37.201	−22 2 33.80	+ .053	−1.65	+ .049	+ .63	+ .063	+ .39
8403	13 53.700	−12 46 42.49	+ .020	− .15	+ .010	+ .01	+ .029	− .23
8409	15 4.106	−19 21 13.21	+ .009	+ .20	+ .006	+ .59		
8414	15 46.181	+34 44 51.07	− .035	+ .23	− .109	+ .24		
8416	16 1.629	−35 54 40.60						
8418	20 16 26.605	− 6 35 49.44	− .040	− .08				
8423	16 47.960	−15 1 9.69	+ .002	+ .14	+ .013	+ .24	+ .018	− .10
8425	16 51.179	+14 19 54.10	− .078	+ .05				
8430	17 32.068	+39 9 57.42	− .041	+ .21	− .011	+ .17	+ .022	+ .15
8441	19 22.195	+26 3 27.11	− .023	+ .86				
8444	20 19 32.130	+40 0 57.21	− .041	+ .15	− .033	+ .50	+ .006	+ .36
8448	20 20.389	+42 44 26.92	− .066	+ .20				
8450	20 51.552	−28 54 28.15	+ .085	−2.47	+ .036	− .36		
8462	22 57.561	+17 4 9.10	− .042	+ .39				
8463	23 1.829	−18 27 30.83	+ .035	+ .20	+ .026	+ .89	+ .046	+ .35
8464	20 23 31.708	−25 51 18.18	+ .017	− .30	+ .055	+ .55		
8475	24 28.527	+ 8 11 17.99	− .009	+ .20				
8477	24 34.841	+56 23 27.46	− .040	+ .33	− .086	+ .53		
8476	24 35.072	−18 3 45.59	− .003	+ .30	− .013	+ .34	+ .026	− .14
8479	24 47.475	+38 11 35.59	− .029	− .01	− .049	+ .40	+ .047	+ .14
8480	20 25 7.494	−22 38 28.84	+ .074	− .20	+ .018	− .01		
8485	25 43.859	− 3 8 9.36	+ .021	+ .34	+ .005	+ .51	+ .032	+ .06
8492	26 19.804	+30 7 2.92	− .030	+ .16	− .044	+ .45	+ .032	+ .09
8493	26 28.663	+36 12 12.95	− .065	+ .27	− .104	+ .65	+ .011	− .07
8500	27 44.071	+48 41 55.66	− .147	− .01	− .072	+ .24	+ .034	− .11
8503	20 28 17.586	−10 6 37.29	+ .035	− .55	+ .011	+ .43		
8507	28 19.534	+62 44 30.04	− .056	+ .35	− .050	+ .41	+ .026	− .08
8509	28 59.887	+48 57 59.55	− .041	+ .10	− .050	+ .54		
8514	29 37.788	+11 2 50.85	+ .001	+ .34	− .010	+ .59	+ .034	− .01
8518	30 15.940	+ 4 38 29.50	+ .026	− .26				
8521	20 30 20.803	+72 16 39.86	+ .003	+ .24	− .004	+ .56	+ .116	+ .10
8527	31 48.090	+14 24 52.54	− .046	− .04	− .010	+ .77	+ .021	− .15
8531	32 30.916	+74 41 52.13	− .052	− .16	− .120	− .06	+ .005	+ .01
8537	33 1.119	+81 10 1.80	− .012	− .10	+ .004	− .04	+ .176	− .56
8543	34 1.906	+14 20 0.34	− .025	+ .16	− .011	+ .76	+ .029	+ .19
8547	20 35 8.414	− 5 11 38.36	+ .011	+ .26				
8548	35 10.283	+20 56 13.69	− .036	+ .57	+ .007	+ .84	+ .040	+ .09
8549	35 11.589	+13 3 3.35	− .021	+ .32	+ .028	+1.41		
8550	35 15.831	+23 51 7.35	− .019	+ .12	+ .032	+ .83		
8553	35 29.178	+ 9 49 16.36	+ .017	+ .72	− .019	+ .85	+ .013	+ .55
8556	20 35 37.779	−33 41 53.90			− .069	−1.29		
8557	35 46.937	−18 24 13.71	− .007	+ .02	− .003	+ .29	+ .018	− .35
8559	36 9.238	+15 38 47.78	− .022	+ .09	− .021	+ .68	+ .021	− .07
8565	36 42.123	+83 22 2.34	− .111	− .42	+ .033	+ .17	+ .097	− .48
8571	38 0.270	+32 2 23.33	− .091	+ .53	− .059	+ .93		
8580	20 38 52.442	+45 0 42.16	−0.055	+0.19	−0.027	+0.49	+0.031	+0.21
8583	39 0.089	+79 9 55.42	− .093	− .16				
8586	39 57.445	+14 48 16.81	− .015	+ .64	+ .007	+ .71	+ .037	+ .11
8595	41 24.393	+20 13 4.54	− .059	+ .35				
8597	41 39.522	−25 32 29.91	+ .020	− .85	+ .037	− .12	+ .061	− .68
8607	20 43 10.499	+33 41 18.77	− .062	+ .14	− .065	+ .48	+ .012	+ .09
8606	43 10.729	+15 51 11.58	+ .004	+ .55	+ .005	+ .90	+ .065	+ .20
8611	43 29.443	+57 18 36.38	− .085	+ .42	− .022	+ .06	+ .041	− .11
8610	43 37.058	− 9 46 16.74	+ .007	− .14	+ .012	+ .23	+ .031	− .13
8614	43 46.007	+61 32 49.42	− .018	+ .27	− .008	− .05	+ .032	− .19
8612	20 43 46.879	− 5 18 11.71	+ .021	+ .08	+ .028	+ .33	+ .029	+ .10
8615	44 5.430	+ 5 43 54.35	− .001	− .32	− .011	− .63		
8617	44 10.732	+52 43 18.03	+ .015	− .04				
8618	44 29.138	+36 12 52.18	− .086	+ .60	− .020	+ .92	+ .018	+ .63
8620	44 40.743	+27 19 7.06	− .046	+ .58				
8622	20 44 50.664	−26 3 32.71	+ .038	− .47	+ .061	+ .72		
8628	45 25.872	− 0 50 29.28	− .020	− .29				
8637	46 33.838	−12 49 25.74	+ .004	+ .06	+ .008	− .04		
8636	46 34.348	−21 35 28.65	− .014	− .89				
8642	47 20.952	−27 12 2.82	+ .016	+ .59	+ .005	+ .47	+ .027	+ .01
8645	20 47 24.968	+43 46 34.21	− .070	+ .30	− .050	+ .71		
8648	47 58.539	+63 45 43.62	− .014	+ .09				
8652	48 6.936	+82 15 17.48	− .091	− .16	− .147	− .14	+ .040	− .15
8650	48 36.607	− 9 15 56.54	+ .008	− .33	+ .006	+ .48	+ .025	− .20
8670	51 2.377	+80 16 18.65	− .107	+ .02	− .204	− .11	+ .056	+ .07
8669	20 51 21.741	+27 46 17.82	− .025	+ .42	.000	+ .44	+ .037	+ .07
8672	51 46.151	+36 47 14.88	− .064	+ .98				
8674	52 3.577	+13 26 4.46	− .034	+ .39	− .042	+ .89		
8677	52 50.916	− 9 59 9.80	− .015	− .12	+ .038	+ .30	+ .042	− .31
8680	53 28.888	−16 19 16.27	+ .033	− .23	+ .009	− .07		
8685	20 54 3.416	+ 3 54 19.54	+ .011	+ .29				
8688	54 22.546	+40 52 39.79	− .029	+ .21	+ .003	+ .82	+ .035	+ .02
8693	54 55.100	+22 2 6.37	− .049	+ .15	− .062	+ .58		
8705	56 36.958	− 5 1 15.32	+ .019	− .27	+ .019	+ .23	+ .045	− .08
8706	56 41.719	−32 33 7.14			− .031	− .09	+ .010	− .28
8709	20 57 16.407	+47 13 39.35	− .057	+ .39	− .081	+ .32	+ .037	+ .15
8720	58 33.753	+45 51 38.16	− .051	− .18	− .005	+ .36		
8725	20 59 52.799	+56 46 31.03	− .036	+ .06				
8726	21 0 8.341	−20 9 9.12	+ .008	− .31	+ .009	+ .51	+ .023	− .07
8730	0 40.902	+67 51 59.81	.000	+ .32				
8734	21 1 44.022	−17 31 54.69	+ .001	− .48	.000	+ .40	+ .023	− .28
8735	1 49.835	−32 38 32.02			+ .066	+2.10		
8738	2 12.076	+43 37 40.77	− .017	− .01	− .025	+ .45	+ .042	− .08
8741	2 42.484	− 0 24 22.49	+ .019	+ .48				
8742	2 44.666	−25 18 24.36	− .021	− .87	− .007	− .11	+ .029	− .49
8746	21 3 7.626	+26 37 24.20	− .050	+ .32				
8747	3 21.341	+30 52 59.83	− .024	+ .33	− .008	+ .27		
8749	3 32.017	+38 22 46.71	− .031	− .20	− .055	− .20	+ .019	− .47
8751	4 1.001	+47 20 46.87	− .048	− .06	− .050	+ .60	+ .036	+ .09
8750	4 2.000	+15 21 25.70	+ .009	− .10				
8752	21 4 16.037	−21 29 44.97	+ .013	− .67	− .021	+ .40		
8755	4 30.148	−28 46 44.14	+ .041	−1.54				
8757	4 45.866	+ 6 41 8.39	− .011	+ .71				
8763	5 30.630	−11 40 34.69	+ .003	− .06	− .012	+ .04	+ .022	− .20
8773	6 41.687	+ 9 49 42.96	+ .003	+ .41	+ .028	+ .51	+ .041	− .06
8778	21 7 1.688	+77 49 21.17	− .118	+ .06	− .130	− .08	+ .017	− .09
8788	8 50.748	−27 55 34.56	− .004	− .38	+ .044	+ .78	+ .029	− .23
8794	9 44.552	+29 55 6.81	− .034	+ .08	− .041	+ .37	+ .014	− .12
8796	9 53.733	+59 40 39.65	− .037	+ .27	+ .033	− .22	+ .096	+ .03
8807	11 6.718	− 5 51 46.01	+ .016	− .04				

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
8809	21 11 47.724	+37 43 28.39	−0.054	−0.08	−0.013	+0.43	+0.008	−0.02
8811	12 4.498	− 4 56 12.99	+ .004	+ .15	− .019	+ .27	+ .018	− .10
8814	12 38.270	+25 7 17.41	− .061	+ .07				
8819	13 23.714	−32 29 12.30			− .004	+1.13	+ .066	+ .36
8822	13 45.066	−18 18 0.29	+ .022	− .46	− .010	+ .78		
8829	21 14 28.072	+39 4 46.97	− .028	+ .23	− .028	+ .65	+ .020	+ .21
8837	14 36.868	+86 43 44.82	− .262	− .36	− .192	+ .12	+ .212	+ .11
8830	14 49.925	+34 34 52.33	− .045	− .13	− .086	+1.08	+ .022	− .08
8832	15 14.118	+10 53 11.62	+ .017	− .12				
8836	15 39.249	+43 37 46.61	− .049	− .18	+ .070	+ .74		
8844	21 16 22.625	+37 55 12.78	− .043	− .29				
8847	16 47.473	+62 16 2.46	+ .030	− .12	+ .015	− .20	+ .098	− .22
8852	17 16.033	+52 44 24.14	+ .001	+ .11				
8856	18 4.399	−17 9 16.98	+ .012	+ .36	+ .009	+ .53	+ .028	+ .32
8857	18 15.747	+ 4 1 32.19	− .005	+ .07				
8859	21 18 37.015	+19 28 58.46	− .044	+ .41	− .010	+ .68	+ .026	+ .06
8866	20 5.728	−13 12 2.66	+ .003	− .24	+ .034	+ .63		
8874	21 22.342	− 3 52 44.91	+ .008	+ .22	+ .043	+ .36		
8884	22 23.321	−22 44 13.49	+ .029	− .36	+ .002	+ .06	+ .032	− .36
8885	22 42.998	+36 20 34.07	− .060	+ .08	− .046	+ .54	+ .010	+ .27
8887	21 22 57.591	+19 2 59.89	+ .022	+ .40				
8900	24 21.648	+27 16 52.89	− .016	+ .65	+ .012	+ .44		
8901	24 27.047	−22 8 4.68	+ .063	− .62	+ .051	+ .33	+ .059	− .10
8902	24 35.154	−31 33 58.17			− .006	+ .53		
8903	24 42.983	+ 7 52 7.06	− .009	− .27				
8907	21 25 47.195	−19 28 33.20	.000	− .13	+ .051	− .18		
8916	26 40.764	+46 12 33.57	− .036	+ .16	− .036	+ .23	+ .011	+ .13
8918	26 59.031	+35 8 34.12	− .095	− .26				
8922	27 36.722	− 5 54 6.78	+ .001	+ .70	+ .009	+ .31	+ .027	− .10
8925	27 41.936	+70 13 52.44	− .010	− .03	− .036	.00	+ .023	− .51
8923	21 27 42.712	−34 16 33.53			+ .091	+ .99		
8926	28 14.263	−24 55 20.87	+ .041	− .77	+ .027	+1.12		
8947	31 8.316	+22 25 16.09	− .035	− .36				
8948	31 9.446	+45 15 34.84	− .047	− .25	− .029	+ .36	+ .003	.00
8952	31 42.596	+38 11 49.70	− .065	.00	− .007	+ .48	+ .028	+ .22
8957	21 32 53.025	−19 48 9.92	+ .005	.00	− .010	+ .88	+ .018	+ .11
8963	33 27.953	+11 22 55.39	+ .015	− .20				
8964	33 30.528	+50 9 53.98	− .028	− .10				
8967	33 45.646	− 8 11 28.72	+ .006	+ .17	+ .005	+ .28	+ .030	− .04
8968	33 56.409	+40 4 33.80	− .087	− .05	− .040	+ .62	− .013	+ .09
8975	21 35 54.488	+61 44 35.38	− .001	+ .02	− .069	− .27		
8972	35 56.278	−17 0 6.68	+ .007	− .29	− .015	+ .12	+ .014	+ .06
8985	36 37.909	+57 8 57.85	− .041	+ .05	− .065	− .10	+ .064	+ .59
8995	38 19.601	+59 24 38.54	− .051	− .29				
8993	38 20.677	+ 0 56 35.26	− .030	+ .54	+ .017	+1.20		
8996	21 38 28.388	−19 12 31.91	+ .010	− .09	+ .016	+ .39	+ .027	.00
9001	39 16.226	+45 25 23.91	− .004	+ .04				
9007	39 56.675	+ 7 11 8.90	− .018	− .10				
9008	40 29.104	−33 22 7.16			+ .012	+ .15	+ .054	+ .37
9009	40 30.119	+ 9 31 49.77	− .022	+ .51	− .018	+ .54	+ .021	− .01
9010	21 40 49.732	+70 57 57.22	− .039	+ .24	− .024	+ .21	+ .042	− .20
9012	41 14.847	+25 17 58.66	− .029	+ .02	− .007	+ .57	+ .046	− .09
9018	42 30.009	−11 42 45.39	+ .040	− .65	+ .047	+ .34	+ .055	− .46
9019	42 33.483	+35 30 38.74	− .157	+ .18				
9020	42 38.817	− 2 33 36.06	− .011	+ .14				
9021	21 42 54.220	−16 28 6.04	− .007	.00	− .002	+ .22	+ .015	− .24
9026	43 17.082	+60 46 27.41	− .002	+ .34	+ .018	+ .01	+ .089	− .22
9024	43 20.390	−31 14 46.61			+ .063	− .08		
9027	43 25.813	+ 2 20 19.05	+ .016	+ .55	− .007	+ .67	+ .035	− .25
9028	43 30.665	+16 50 48.73	− .023	+ .60				
9035	21 44 1.205	+48 57 43.05	−0.035	−0.15	−0.010	+0.19	+0.026	−0.15
9042	45 34.579	−27 45 13.40	+ .007	−1.21	+ .040	+1.32		
9050	46 31.469	+29 49 27.65	− .034	+ .20	− .081	+ .15	− .005	+ .02
9052	46 36.928	+40 47 54.91	− .006	− .01				
9055	47 8.703	−23 37 13.48	− .002	− .56				
9071	21 49 12.557	−13 54 19.83	+ .006	+ .22	+ .007	+ .46	+ .020	− .06
9073	49 38.890	+25 34 18.01	+ .001	+ .44	+ .011	+ .30	+ .073	+ .10
9076	49 51.155	+54 19 45.77	− .075	− .14				
9079	50 35.285	+55 51 30.87	− .090	+ .39	− .042	+ .48	+ .060	+ .49
9087	51 36.926	+31 59 0.67	− .058	+ .42				
9090	21 51 54.811	+73 20 50.60	− .088	+ .13	− .160	+ .07	+ .035	+ .08
9094	52 21.751	+56 15 20.09	− .052	− .14	− .017	+ .12	+ .087	+ .02
9096	52 53.495	+20 52 58.64	− .013	+ .62				
9101	53 3.958	+79 11 48.58	− .169	+ .20	− .132	− .07		
9098	53 16.878	+11 43 10.80	− .020	+ .15	− .041	+1.00		
9109	21 54 42.299	+ 3 25 16.36	− .018	+ .20				
9110	55 0.357	− 4 43 36.28	+ .005	+ .45				
9113	55 16.068	+65 47 52.89	− .064	− .05				
9118	56 31.956	−28 48 51.89						
9124	57 14.777	+ 0 14 38.32	− .039	− .16	− .001	− .35	+ .026	− .14
9125	21 57 26.048	+12 45 36.09	− .021	− .27	− .016	+ .37	+ .013	− .26
9132	58 4.277	−18 15 50.61	− .020	+ .03	+ .012	+ .63		
9136	58 11.079	+72 49 21.80	+ .025	− .08	− .095	+ .07	+ .061	− .13
9144	21 59 26.117	− 2 31 4.81	− .003	+ .36	− .008	+ .35	+ .026	+ .22
9155	22 0 49.445	+ 9 52 35.63	− .037	+ .61				
9156	22 0 55.986	− 1 16 10.86	− .037	+ .13	− .048	+ .03		
9163	1 53.809	+ 4 41 28.78	− .014	+ .14	− .040	+ .80	− .007	− .05
9164	1 55.951	− 0 41 5.33	− .004	+ .24	+ .008	+ .22	+ .026	− .14
9165	2 10.670	+28 35 56.93	− .008	+ .47	− .034	+1.01		
9167	2 23.354	−14 14 3.01	+ .042	+ .05	+ .037	+ .45	+ .046	− .04
9169	22 2 43.611	+62 25 9.63	− .023	+ .14	− .009	− .16	+ .057	− .03
9173	3 4.571	−22 36 26.45	+ .010	− .62				
9176	3 31.064	+24 58 41.65	− .010	+ .29	− .024	+ .66	+ .049	+ .01
9177	3 54.690	+17 38 4.92	− .009	+ .48				
9179	4 0.731	−33 21 18.52			− .014	+ .41	− .015	− .10
9180	22 4 2.823	−34 24 36.95			− .118	− .19		
9191	5 38.932	+45 22 23.71	− .054	+ .23				
9194	5 54.055	+32 48 19.54	− .057	+ .18	− .056	+ .64	+ .008	+ .32
9198	6 24.975	+ 5 49 41.87	+ .013	+ .23	− .024	+ .09	+ .018	− .35
9201	6 37.007	−11 56 3.86	− .007	− .20	− .001	+ .68		
9202	22 6 39.223	+32 48 34.89	− .033	+ .44	− .029	+ .55	+ .023	+ .11
9203	6 57.376	+20 36 31.87	+ .004	+ .51	+ .052	+ .53	+ .025	+ .11
9210	8 14.951	+57 49 52.03	− .031	− .05	− .008	+ .02	+ .023	− .44
9213	8 22.218	+71 58 17.48	+ .018	− .06	+ .037	+ .15	+ .104	− .34
9216	8 44.123	−26 41 54.59	− .025	− .56				
9222	22 10 3.974	−28 8 21.65	+ .028	− .57	+ .029	+ .08	+ .069	− .37
9226	10 34.679	−16 11 1.36	+ .012	− .55				
9230	10 39.379	+39 20 32.40	− .051	+ .14	− .073	+ .41	+ .030	− .22
9234	10 59.615	+ 3 54 32.86	+ .015	+ .14				
9236	11 16.518	+22 9 2.37	− .020	+ .11				
9239	22 11 35.154	+42 34 53.19	− .017	+ .39	− .023	+ .47		
9244	12 52.653	− 8 9 26.26	+ .018	+ .27	+ .023	+ .25	+ .035	− .07
9248	13 11.634	− 5 45 44.33	− .010	− .37	− .008	+ .17		
9253	13 30.190	+12 31 17.83	− .003	− .04				
9265	15 38.698	+37 23 31.53	− .062	+ .35	− .135	− .78		
9266	22 15 45.694	+62 25 40.92	− .066	+ .30	− .067	− .48		
9270	16 15.197	− 8 11 53.73	− .018	+ .28	− .012	+ .73	− .008	− .01
9278	17 20.906	+56 32 25.40	− .016	+ .13				
9279	17 28.030	−21 58 28.71	− .016	− .23	+ .012	+ .32	+ .006	+ .14
9280	17 36.986	+30 55 56.32	− .003	− .07				

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei		Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			$\Delta\alpha$	$\Delta\delta$	$\Delta\alpha$	$\Delta\delta$	$\Delta\alpha$	$\Delta\delta$				$\Delta\alpha$	$\Delta\delta$	$\Delta\alpha$	$\Delta\delta$	$\Delta\alpha$	$\Delta\delta$
	h m s	° ′ ″	s	″	s	″	s	″		h m s	° ′ ″	s	″	s	″	s	″
9282	22 17 46.990	− 1 45 56.96	+0.017	−0.29	+0.018	+0.19	+0.027	−0.34	9527	22 53 6.409	+11 26 50.82	−0.010	−0.25				
9283	17 49.534	+11 49 36.48	− .011	− .02	+ .006	+ .47	+ .046	− .31	9531	53 30.661	−30 1 12.54	+ .035	− .36	+0.038	+0.02	+0.059	−0.37
9294	19 30.236	+85 43 53.11	− .418	− .22	− .304	+ .03	+ .087	− .01	9534	53 43.658	+ 3 24 29.73	− .001	− .06				
9296	20 26.141	−13 54 36.06	+ .020	+ .26	+ .018	+ .37	+ .049	+ .06	9535	53 46.718	+20 21 59.07	− .028	+ .67	− .032	+ .96		
9299	20 36.436	+51 51 10.56	− .007	+ .50	+ .009	+ .54	+ .051	+ .31	9543	55 4.080	+83 56 42.20	− .117	+ .10	− .190	+ .42	+ .506	+ .20
9303	22 21 26.818	+ 0 59 46.55	− .009	− .07	+ .002	+ .10	+ .035	− .11	9544	22 55 26.610	+11 19 39.52	+ .001	+ .43	+ .029	+ .54	+ .055	+ .25
9306	22 2.027	−24 3 51.11	− .032	− .61	+ .016	− 40			9548	55 55.069	+52 15 6.25	− .049	+ .37				
9309	22 3.101	+50 52 27.17	− .011	− .12					9553	56 47.148	− 0 13 1.89	+ .008	+ .04	+ .023	+ .45		
9307	22 3.424	+18 3 44.66	− .021	+ .56					9557	57 29.820	− 7 27 50.97	+ .012	+ .18	+ .020	+ .44		
9323	24 58.309	− 0 24 16.66	+ .004	+ .25	− .006	+ .11	+ .075	− .02	9565	58 27.931	+41 55 21.54	− .036	− .33	− .037	+1.14	+ .030	+ .02
9324	22 25 23.356	+ 8 44 43.92	− .026	+ .17	− .017	+ .81			9567	22 58 44.121	−21 16 18.78	− .004	− .32				
9327	25 34.510	−27 29 29.07	+ .017	− .65					9571	59 21.114	−35 9 18.65			− .024	+ .03		
9328	25 39.199	+26 22 45.24	− .039	+ .19	− .052	+ .63			9572	22 59 38.643	+62 56 13.37	− .014	+ .40				
9333	26 22.923	+58 1 51.41	− .022	+ .31	− .008	+ .16	+ .018	+ .17	9575	23 0 3.589	+ 3 24 57.25	− .033	− .01	− .007	+ .19	+ .042	− .29
9336	26 35.751	+32 11 17.89	− .097	− .25	− .078	+ .33	− .015	− .02	9576	0 8.109	+27 40 32.39	− .058	− .06	− .044	+ .55	+ .026	− .20
9337	22 26 40.773	−11 3 44.14	− .004	+ .08	− .011	+ .36	+ .013	− .06	9580	23 1 1.390	+14 48 5.14	− .019	+ .38	− .011	+ .49	+ .026	− .02
9342	27 14.806	−32 43 51.90			+ .037	+ .73	+ .070	− .16	9582	1 15.178	− 8 5 55.75	+ .004	+ .70	+ .010	+ .18	+ .015	+ .03
9346	27 25.834	− 3 17 44.98	+ .064	+ .08					9592	3 13.516	+ 9 0 14.88	+ .016	+ .59	.000	+ .67	+ .041	+ .08
9349	27 42.808	−11 17 25.36	− .026	+ .10	+ .015	+ .19			9594	3 30.959	+35 13 49.84	− .048	+ .10				
9355	28 11.864	+49 53 47.46	− .016	− .03	− .014	+ .41	+ .060	− .17	9596	3 43.767	+20 10 35.12	− .056	+ .12				
9362	22 29 7.255	+39 23 36.98	− .031	+ .02	− .071	+ .44			9600	23 4 3.179	+29 38 54.99	− .019	− .06				
9370	30 35.668	−21 5 34.54	+ .006	− .26	+ .033	+ .20	+ .047	− .32	9602	4 13.180	+45 58 54.83	− .056	+ .39	− .113	+ .47		
9371	30 57.640	+75 50 23.26	+ .010	+ .17	− .081	− .12	+ .030	+ .14	9604	4 20.630	+48 53 13.46	− .067	− .10	+ .002	+ .94	+ .080	+ .30
9375	31 30.172	− 0 30 16.35	+ .007	+ .06	− .008	+ .28	+ .028	− .17	9607	4 50.397	+ 1 43 8.82	− .009	− .54	+ .005	− .28	+ .002	− .53
[illegible]	31 46.670	−17 50 52.74	+ .035	− .78	+ .028	+ .05			9610	5 27.029	−21 34 47.07	− .001	+ .33	+ .028	+ .27	+ .027	− .03
9384	22 32 46.178	+49 40 55.51	− .065	+ .14	− .060	+ .10			9611	23 5 30.450	+74 58 54.73	+ .038	− .05	+ .010	− .03	+ .080	− .20
9389	33 52.375	− 4 36 55.26	− .016	+ .14	+ .022	+ .08	+ .018	− .03	9612	5 41.759	−28 29 44.04	− .026	+ .16				
9392	33 54.947	+73 15 13.15	− .094	+ .26	− .046	+ .32	− .001	− .03	9613	5 44.241	+ 8 16 13.76	− .030	+ .35	− .043	+ .72		
9391	33 58.797	+23 36 43.05	− .038	+ .14					9625	6 58.970	+43 8 27.97	− .015	.00	+ .028	+ .10		
9397	34 26.124	− 8 17 15.80	+ .029	− .23					9629	7 56.919	+ 8 18 45.34	− .011	+ .37	+ .012	+ .41	+ .032	+ .03
9399	22 34 37.495	−33 28 19.43			− .011	− .39			9636	23 9 39.775	+56 45 14.16	− .048	+ .13	− .070	− .33	+ .049	− .77
9405	35 53.514	+38 39 34.33	− .031	+ .39	− .040	+ .49	+ .022	+ .03	9642	10 26.329	− 6 27 12.88	+ .002	+ .46	+ .026	+ .04	+ .026	− .20
9406	35 59.141	+63 11 39.62	− .039	+ .39	− .056	+ .15	+ .069	+ .46	9645	10 45.718	−11 5 48.13	+ .028	− .45				
9410	36 30.663	−27 26 6.56	+ .025	− .37	− .002	+ .58	+ 004	− .03	9651	11 42.086	+25 15 46.57	− .028	− .01				
9413	37 9.593	+14 9 16.44	− .016	+ .31	− .010	+ .81			9650	11 42.483	− 3 54 19.73	+ .028	+ .04	+ .037	+ .13		
9417	22 37 43.232	+10 26 22.00	− .023	+ .37	− .013	+ .42	+ .029	− .11	9655	23 11 57.788	− 9 29 47.95	− .045	− .44	− .002	+ .07	+ .024	− .26
9420	38 0.907	+30 34 25.01	− .043	+ .03					9660	13 16.616	+ 2 52 20.14	− .006	+ .58	+ .012	+ .34	+ .027	− .21
9429	39 5.137	+ 4 34 31.68	+ .017	− .33					9670	14 46.703	−32 56 27.14			− .033	− .05	+ .011	− .46
9435	39 29.000	+29 49 42.93	− .037	+ .10	− .023	+ .72	+ .026	− .05	9674	15 2.478	−28 47 54.51	+ .031	− .81				
9441	40 44.519	+41 25 30.84	− .044	− .34	− .043	− .02	+ 006	− .15	9675	15 3.656	−10 1 15.36	− .017	− .06	− .025	+ .38	+ .026	− .16
9448	22 41 49.113	+18 58 14.58	− .055	+ .04	− .035	+ .67			9678	23 15 27.408	−18 29 9.94	+ .006	+ .29				
9452	42 41.963	+ 7 11 16.31	+ .019	+ .33					9680	15 32.192	+67 42 3.62	+ .010	+ .40	− .061	+ .19	+ .046	− .21
9454	42 54.966	+23 10 14.10	− .032	+ .12	− .027	+ .46	+ 020	− .09	9685	16 31.259	+ 4 58 18.33	+ .009	+ .30	− .020	+ .59		
9456	43 31.584	−20 0 18.04	− .010	− .56	+ .041	+ .54			9690	16 55.283	+23 19 46.64	− .042	+ .50	− .056	+ .84	+ .002	− .05
9457	43 38.086	− 2 11 3.64	+ .023	− .18					9693	17 15.767	+37 46 21.49	− .011	+ .24	+ .008	+ .98		
9461	22 43 43 942	−14 27 7.69	+ .018	− .64	− .016	+ .83			9705	23 19 2.042	−20 30 37.16	+ .028	− .59	− .003	− .41	+ .045	− .73
9462	43 49.431	−26 18 20.82	+ .023	−1.04					9707	19 11.327	+59 43 19.22	− .030	+ .11	+ .020	+ .19		
9473	45 37.353	−13 59 19.55	− .007	+ .15	− .013	+ .66	+ .021	+ .05	9709	19 17.519	+11 54 8.97	− .010	− .05	+ .004	+ .34		
9475	46 22.846	+24 12 18.80	− .028	+ .18	− .025	+ .56	+ .034	− .01	9720	21 10.316	+31 58 21.55	− .023	+ .02	+ .025	+ .16	+ .057	+ .02
9487	47 0.325	+65 48 20.51	+ .018	+ .09	.000	+ .03	+ .013	− .18	9721	21 29.810	+61 52 15.32	− .060	+ .52	− .085	+ .14	+ .002	+ .13
9495	22 47 49.350	+82 45 21.45	− .115	− .02	− .227	− .11	+ .168	− .02	9722	23 21 37.986	+22 59 27.68	− .024	+ .21	− .013	+ .75	+ .042	− .28
9494	47 51.031	+25 59 31.64	− .012	+ .85					9726	22 6.509	−21 3 11.95	− .006	+ .45	− .001	+ .08		
9497	48 21.649	−33 16 25.57			− .044	+ .06	+ .009	− .66	9730	23 5.234	+ 0 50 41.35	− .002	+ .08	− .015	+ .03	+ .022	− .22
9498	48 35.929	+ 9 26 10.57	− .023	+ .32	− .010	+ .59	+ .022	+ .11	9737	23 59.449	−35 57 27.78			+ .014	+ .54		
9501	48 42.165	− 7 58 44.68	+ 004	+ .12	+ .005	+ .30	+ .031	− .15	9740	24 9.730	+ 5 58 0.37	− .016	− .23	− 016	+ .04	− .007	− .44
9506	22 50 3.074	+67 35 23.84	− .001	+ .07					9741	23 24 11.075	−11 51 44.79	− .007	− .20				
9513	50 40.342	−16 13 12.26	+ .034	+ .16	+ .043	+ .06	+ .033	− .11	9744	24 27.874	−25 50 0.28	+ .034	− .33				
9514	50 47.513	−16 40 12.07	+ .028	− .53	− .014	− .44			9752	25 15.704	+15 35 57.18	− .016	− .13				
9518	51 33.004	+36 40 35.71	− .068	+ .17					9753	25 21.582	+12 20 47.68	− .013	− .19	− .009	+ .26	+ .008	− .66
9526	53 2.330	+56 2 59.23	− .030	+ .38					9755	25 39.544	− 1 26 55.63	+ .025	− .09	+ .038	−1.04		

Cat. No.	R. A. 1925.0	Decl. 1925.0	W−Gr		W−Bs		W−Ei	
			Δα	Δδ	Δα	Δδ	Δα	Δδ
	h m s	° ′ ″	s	″	s	″	s	″
9762	23 26 33. 635	+58 8 6. 76	−0. 027	−0. 23	−0. 076	−0. 72	+0. 075	+0. 01
9772	27 43. 404	+86 53 37. 66	− . 258	− . 17	− . 196	+ . 03	− . 004	− . 02
9769	27 46. 626	+28 15 8. 94	− . 037	+ . 26				
9774	[illegible]	+ 6 40 18. 79	+ . 044	+ . 43				
9777	28 47. 193	+77 24 19. 15	− . 038	− . 17				
9780	23 29 1. 595	+53 16 20. 18	− . 037	+ . 40				
9781	29 21. 272	−21 19 45. 24	+ . 013	− . 73	+ . 004	− . 33	+ . 043	− . 36
9784	29 42. 544	+22 5 5. 17	− . 032	+ . 29	+ . 064	+1. 58		
9785	30 13. 702	+30 54 40. 03			− . 004	− . 34	+ . 048	− . 43
9786	30 17. 606	− 1 39 42. 68	+ . 009	− . 07	− . 036	+ . 24	+ . 015	− . 11
9789	23 30 57. 083	+39 49 22. 04	− . 015	+ . 12	− . 042	− . 05	+ . 066	− . 09
9790	31 22. 976	+12 14 53. 77	− . 008	+ . 20				
9793	31 39 961	− 7 52 46. 90	− . 008	− . 02	+ . 016	+ . 13	+ . 031	− . 25
9794	31 46. 139	+67 4 36. 89	− . 042	+ . 09				
9799	32 33. 601	+ 1 41 9. 39	− . 013	+ . 25	− . 001	+ . 54		
9810	23 33 51. 703	+44 0 50. 85	− . 007	− . 20				
9811	33 53. 204	+46 3 6. 24	+ . 001	+ . 12	+ . 005	+ . 26	+ . 046	− . 04
9817	34 9. 221	−15 30 29. 06	+ . 038	+ . 58				
[illegible]	34 27. 112	+42 51 10. 06	− . 025	+ . 41	− . 015	+ . 52	+ . 025	− . 06
9824	35 29. 799	+50 3 22. 69	− . 078	+ . 25	− . 087	+ . 75		
9827	23 36 4. 337	+73 35 13. 39	− . 007	+ . 38				
[illegible]	36 5. 499	+ 5 13 10. 79	+ . 003	+ . 12	. 000	+ . 40	+ . 026	− . 18
9828	36 15. 246	+77 12 49. 04	+ . 078	+ . 29	− . 093	− . 55	+ . 115	− . 27
9832	36 42. 248	−32 29 16. 23			+ . 035	− . 34		
9833	36 42. 465	+43 55 6. 74	− . 010	− . 27	− . 011	+ . 47	+ . 056	− . 07
9834	23 36 55. 471	+36 18 16. 30	− . 042	− . 02				
9835	[illegible]	− 8 19 45. 11	+ . 044	+ . 16				
[illegible]	38 13. 144	+ 1 22 1. 91	+ . 013	− . 53	+ . 015	− . 09	+ . 036	− . 28
9848	38 50. 047	−14 57 35. 18	+ . 012	− . 41	+ . 015	− . 29	+ . 024	− . 33
9858	40 18. 774	−18 41 35. 86	− . 019	− . 23	− . 023	+ . 14	+ . 023	− . 18
9869	23 42 18. 656	+46 0 14. 35	+0. 017	+0. 39	−0. 041	+0. 80	+0. 052	+0. 52
9871	42 33. 511	+ 3 4 14. 60	+ . 028	+ . 51	+ . 056	+ . 61	+ . 044	− . 02
9880	44 5. 187	− 3 10 43. 01	+ . 004	+ . 24	− . 018	+ . 31		
9882	44 18. 731	+67 23 24. 22	− . 045	+ . 48	− . 004	− . 03	+ . 055	+ . 12
9889	45 1. 368	−28 32 42. 70	+ . 006	− . 20	+ . 014	− . 29	+ 047	− . 69
9891	23 45 26. 456	−28 16 13. 18	+ . 040	− . 55				
9893	45 33. 267	−22 1 52. 09	+ . 016	+ . 18				
9897	45 51. 405	+28 25 29. 37	− . 031	+ . 32	− . 030	+ . 52		
9899	46 22. 559	−10 23 34. 19	+ . 008	− . 01	+ . 047	− . 49	+ . 008	− . 08
9902	47 18. 476	+63 34 4. 29	− . 100	+ . 10				
9903	23 47 31. 478	+ 8 53 51. 08	+ . 010	+ . 32	+ . 023	− . 01		
9908	48 7. 402	+ 2 30 48. 40	+ . 022	+ . 49	− . 029	+ . 34		
9912	48 40. 170	+18 42 13. 50	− . 010	+ . 14	+ . 008	+ . 63	+ . 024	− . 16
9914	49 14. 227	+ 1 40 25. 02	+ . 004	+ . 05	+ . 015	+ . 31	+ . 004	+ . 16
9920	50 37. 591	+57 4 55. 75	− . 055	+ . 48	− . 050	− . 02	+ . 029	− . 07
9925	23 51 9. 627	+73 59 34. 07	+ . 028	− . 42	+ . 075	− . 18	+ . 051	− . 33
9935	52 51. 995	+22 13 50. 89	− . 031	+ . 61				
9936	52 53. 936	+82 46 24. 77	− . 193	− . 04	− . 435	+ . 13	− . 072	− . 14
9943	53 55. 961	+24 43 28. 43	− . 071	+ . 46	− . 032	+ . 70	− . 013	− . 03
9946	54 29. 791	−16 15 54. 12	+ . 022	− . 21	+ . 003	+ . 08		
9947	23 54 31. 520	+34 35 43. 39	− . 051	+ . 07				
9949	54 49. 973	− 3 58 19. 58	− . 017	+ . 25	− . 010	− . 09	− . 005	− . 16
9955	55 11. 751	+55 20 15. 28	− . 047	+ . 60	− . 058	+ . 59		
9956	55 27. 514	+ 6 26 53. 14	+ . 004	+ . 12	− . 012	+ . 15	+ . 026	− . 12
9958	23 55 49. 802	− 6 18 34. 17	− . 019	+ . 19	+ . 007	+ . 39		
9972	58 6. 856	− 6 25 50. 89	+ . 018	+ . 33	+ . 053	+ . 28	+ . 055	− . 08
9977	58 39. 564	+ 8 4 7. 95	− . 033	+ . 53	− . 028	− . 14		
[illegible]	59 55. 958	−17 45 12. 30	+ . 014	+ . 12	+ . 034	+ . 57	+ . 034	− . 07

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